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(2)	INFORMATION	FOR	SEO	ID	NO:	119.

	(i)	SEQUENCE	CHARACTERISTICS	
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- (A) LENGTH: 222 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 133..189
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2

seq FGCTFVAFXPAFA/LS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 119:

AGTCTGGGGG TGACATTGCA CCGCGCCCCT CGTGGGGTCG CGTTGCCACC CCACGCGGAC 60

TCCCCAGCTG GCGCGCCCT CCCATTTGCC TGTCCTGGTC AGGCCCCCAC CCCCCTTCCC 120

ACCTGACCAG CC ATG GGG GCT GCG GTG TTT TTC GGC TGC ACT TTC GTC GCG 171

Met Gly Ala Ala Val Phe Phe Gly Cys Thr Phe Val Ala

-15

-10

TTC DGC CCG GCC TTC GCG CTT TCH TTG ATC ACT GTG GCT GGG GAC CGT

Phe Xaa Pro Ala Phe Ala Leu Ser Leu Ile Thr Val Ala Gly Asp Arg

-5 1 5 10

GGG Gly

- (2) INFORMATION FOR SEQ ID NO: 120:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 358 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: CDNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 80..181
 - (C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5.2 seq LWSSCWLAPLADG/ML

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 120:

AAG	ATGA	AGA (GGAG	GC DG	rg go	CAGTO	GTG	G AAG	GAAG.	AGGC	GCG	GCGG	CGG (GGGT <i>I</i>	AGGGAG	60
CCT	GAA!	ACG (CGAGO	CGGGG						ı Asp					C CGT g Arg	112
CGT Arg	TTC Phe	CAG Gln	AAA Lys -20	GGG Gly	TTT Phe	GAC Asp	TGG Trp	AGG Arg -15	AAC Asn	CTC Leu	TGG Trp	AGC Ser	AGC Ser -10	TGT Cys	TGG Trp	160
CTG Leu	GCT Ala	CCT Pro -5	CTG Leu	GCT Ala	GAT Asp	GGC Gly	ATG Met 1	TTG Leu	AGG Arg	TAC Tyr	ATG Met 5	GGC Gly	CAG Gln	CVG Xaa	CAG Gln	208
CGA Arg 10	NGG Xaa	GCA Ala	TCC Ser	AAT Asn	CCA Pro 15	GAG Glu	GGG Gly	TCC Ser	ACT Thr	CTA Leu 20	GAG Glu	GCC Ala	AGG Arg	CCA Pro	CCA Pro 25	256
GCA Ala	CCA Pro	TRG Xaa	GCC Ala	AGT Ser 30	GTG Val	TCA Ser	CCA Pro	AGT Ser	GTA Val 35	AKH Xaa	MTC Xaa	CCT Pro	CAT His	CGA Arg 40	CCC Pro	304
TGG Trp	GCA Ala	GCA Ala	AAA Lys 45	ATG Met	GAG Glu	ACC Thr	GTG Val	AGC Ser 50	CCA Pro	GCA Ala	ACA Thr	AGT Ser	CRC Xaa 55	ATA Ile	GCA Ala	352
GGC Glv	GGG Glv															358

(2) INFORMATION FOR SEQ ID NO: 121:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 178 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 110..172
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.1 seq SLLVVSCFYQISG/RW
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 121:

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ATAGAACTAC TGCGGAACCT CAAAATCAGT AGATTTGGAA GTGATTCAAA GCTAAACTTT	60
TTCCTTGGCC CTCCKTGTGT TCTAATTGCT TTGCAAGTGT AAKACTAGG ATG TCC AAG Met Ser Lys -20	118
ATG CCA GTT TTT GCT TCT TTG TTA GTT GTC AGC TGC TTT TAT CAA ATT Met Pro Val Phe Ala Ser Leu Leu Val Val Ser Cys Phe Tyr Gln Ile -15 -10 -5	166
TCA GGC CGC TGG Ser Gly Arg Trp 1	178
(2) INFORMATION FOR SEQ ID NO: 122:	
(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 204 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 136180 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 5.1</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:	
AACAAAGAGA CACAGACAGG GGACTGTCAG CYGGYACCGG AGGMGCGGAC AACGAGTTAT	60
CAGCAACTSA AAGCACCTGA BGGGCCGCAC ATTCCANCCC CAGCCCAGTC CTCGTCCTCC	120
ACGCCAGCNC CAAGC ATG TSA GTA ACC CAA CTT CTC CCT TTC TCC TCC CCA Met Xaa Val Thr Gln Leu Leu Pro Phe Ser Ser Pro -15 -10 -5	171
GAC TCT GCG GGT CCT TTT CTG TCC CCT TTC TCT Asp Ser Ala Gly Pro Phe Leu Ser Pro Phe Ser 1 5	204

(2) INFORMATION FOR SEQ ID NO: 123:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 216 base pairs
 - (B) TYPE: NUCLEIC ACID

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- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 1..102
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.1

seq SFHFLPWALGAMA/SS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

ATG Met	G G G Gly	AAA Lys	GCA Ala	TGG Trp -30	CAA Gln	GAG Glu	ATG Met	AGG Arg	GTG Val -25	GAA Glu	TGG Trp	GGG Gly	GCA Ala	GAC Asp -20	AAG Lys	48
GGG Gly	AAT Asn	GTC Val	AGA Arg -15	AGC Ser	AGC Ser	TTC Phe	CAC His	TTT Phe -10	CTC Leu	CCC Pro	TGG Trp	GCA Ala	CTG Leu -5	GGA Gly	GCC Ala	96
ATG Met	GCA Ala	AGT Ser 1	TCA Ser	GAG Glu	CAG Gln	GGG Gly 5	AAG Lys	GAG Glu	AGG Arg	TCC Ser	AAC Asn 10	TTG Leu	TGC Cys	TTT Phe	AGG Arg	144
AAG Lys 15	ACT Thr	CCT Pro	CTG Leu	GCT Ala	ATC Ile 20	ACG Thr	GGG Gly	AGA Arg	GGA Gly	ATT Ile 25	GCC Ala	AGG Arg	AGA Arg	CCA Pro	GGG Gly 30	192
					ATG Met											216

(2) INFORMATION FOR SEQ ID NO: 124:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 166 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 2..142
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.1

seq VIRLSQFLLKCWP/RT



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

A .	ATG A Met L	ys V	TG A' al Mo 45	TG A et M	TG A	GG A	ys A:	GG A rg L 40	AG A ys L	AA A ys L	AG G ys A	sp G	AG TO ln Cy 35	GT C' ys Le	rc cca eu Pro	4.9
GG/ Gl	A ATC / Ile -30	TGC Cys	AGG Arg	AGT Ser	CTG Leu	AAG Lys -25	AGG Arg	AGG Arg	AAG Lys	TCC Ser	CCC Pro -20	AGG Arg	AGT Ser	CCT Pro	GGG GLY	97
ATO Met	AAG Lys	GTT Val	ATT Ile	CGA Arg	CTC Leu -10	TCT Ser	CAA Gln	TTC Phe	CTC Leu	CTG Leu -5	AAA Lys	TGT Cys	TGG Trp	CCT Pro	CGT Arg 1	145
	A AGT Ser															166

(2) INFORMATION FOR SEQ ID NO: 125:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 415 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 254..361
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5

seq SFSIXTLLWGLNC/KR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

ACTGTTTTAG	TGTTTTGAAT	ATCTTCTTCC	AGAGTTTGAT	GTATATGTAT	CTTGGAGGTA	60
TATGTATTTC	TAATTATATA	AATATTTGAC	CCTCTTTGCC	TARTTTGTTT	TATTCACTTC	120
AACTTTGACC	CTTTATACTT	CTTTTTAAAT	TTCACTTTCT	TATGGTTGTT	TTTCTACTTT	180
TCCTCAATGC	CCTTTGTAAA	ATTTTCATTT	GAATCTATTA	TTCTCCCTTG	GACGTCTTAA	240
TTCCTTCTCT	ACT ATG ACT Met Thi -35	TTT TCT TT Phe Ser Ph	C TTT TGT T e Phe Cys P -30	TTC TTT CCT The Phe Pro	GGG TTC Gly Phe -25	289
AAG CCA CTC Lys Pro Leu	C CTG TTT CA	AT TAC TTT C	TT TTT WNK eu Phe Xaa	TCC TTT TCT Ser Phe Ser	ATT TKD	337

-20 -15 -10

ACT CTK CTT TGG GGC TTG AAC TGT AAG AGG TCC TGG AAC ATA AAT TTG

Thr Leu Leu Trp Gly Leu Asn Cys Lys Arg Ser Trp Asn Ile Asn Leu

-5

AGA ATT GTT GSA TCA TAC AGT AGT GGT TAC

Arg Ile Val Xaa Ser Tyr Ser Ser Gly Tyr

10 15

(2) INFORMATION FOR SEQ ID NO: 126:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 205 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 11..133
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5

seq RLLLILSGCLVYG/TA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 126:

AGAGGCAACC ATG GCG GGA GGA ATG AAA GTG GCG GTC TCG CCG GCA GTT

Met Ala Gly Gly Met Lys Val Ala Val Ser Pro Ala Val

-40

-35

-30

GGT CCC GGG CCC TGG GGC TCG GGA GTC GGG GGC GGT GGG ACA GTG CGG
Gly Pro Gly Pro Trp Gly Ser Gly Val Gly Gly Gly Thr Val Arg
-25
-20
-15

CTA CTC TTG ATC CTC TCC GGC TGC TTG GTC TAC GGC ACA GCT GAA ACT
Leu Leu Leu Ser Gly Cys Leu Val Tyr Gly Thr Ala Glu Thr
-10 -5 1

GAT GTA AAT GTG GTC ATG CTT CAG GAA TCC CAA GTT TGT GAA AAG CGT
Asp Val Asn Val Val Met Leu Gln Glu Ser Gln Val Cys Glu Lys Arg
5 10 15 20

GCC AGC CTC GGG Ala Ser Leu Gly

- (2) INFORMATION FOR SEQ ID NO: 127:
 - (i) SEQUENCE CHARACTERISTICS:

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(A)	LENGTH: 240 base pairs
(B)	TYPE: NUCLEIC ACID
	STRANDEDNESS: DOUBLE
(D)	TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens
(F) TISSUE TYPE: Muscle

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 58..153

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5

seq PLLSCSCPPPLLG/EG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 127:

AC	TTCCA	.CGG	GACC	CACC.	AG C	TTAA	ATGC	C GG	CAGC	CCTG	GGA	CTTC'	TGG (CCTC	ACA		57
AI Me	G GTT t Val	GAG Glu -30	ATG Met	ACT Thr	GGG Gly	GTG Val	TGG Trp -25	CAG Gln	TGC Cys	CAA Gln	GCC Ala	GAG Glu -20	GCT Ala	GTG Val	AAA Lys	1	105
GG G1	C CTT y Leu -15	CCA Pro	CCT Pro	TTA Leu	CTC Leu	TCG Ser -10	TGC Cys	TCG Ser	TGC Cys	CCT Pro	CCC Pro -5	CCA Pro	TTG Leu	TTA Leu	GGA Gly	1	.53
GA Gl	A GGG u Gly l	CAT His	GCT Ala	CAG Gln 5	GCC Ala	AGC Ser	CCA Pro	TTA Leu	GCC Ala 10	CAG Gln	GAG Glu	GAG Glu	GAC Asp	AAG Lys 15	AAA Lys	2	01
CA Hi	C ACG s Thr	GAG Glu	CAG Gln 20	ACA Thr	CAA Gln	GCC Ala	ACC Thr	TCA Ser 25	CCA Pro	ACC Thr	CAG Gln	CCT Pro				2	40

(2) INFORMATION FOR SEQ ID NO: 128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 59..121
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5

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seq AGLLPLLLGNAPG/ES



(xi) S	SEQUENCE	DESCRIPTION:	SEQ	ID	NO:	128:
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AATI	TGCI	CA C	CACCO	CAGC	AG GC	CAGAC	SAAGO	G CAC	CAGC	CAGG	CAGO	SACCO	GCC F	ACCCI	rccc	58
					GGG Gly											106
				-	GAG Glu 1											154
TGG Tro																157

(2) INFORMATION FOR SEQ ID NO: 129:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 250 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 152..202
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5

seq TWLLLTLQNSVFT/SF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 129:

AGAATTTTGC TGGGAATTAA TATTAAATAC TCACTGGAAT TTATCTTTAC CAACTTTAGT	60
GGAATTCAGC CTATCTACAG CTCTCCTTTC CACTTTGTTT CTCAGAAATT CTCAGCAATG	120
GTTTCATGAA CCACTGGGAG GTCATTTGCC T ATG ATT TTG TCC ACC TGG CTC Met Ile Leu Ser Thr Trp Leu -15	172
TTA CTT ACC CTT CAA AAC TCA GTA TTT ACA TCT TTC AGG ATA TCT CCC Leu Leu Thr Leu Gln Asn Ser Val Phe Thr Ser Phe Arg Ile Ser Pro-10 -5 1 5	220
AAC AGA ATA CAA AGT ATG CTA CCT CCC ATG Asn Arg Ile Gln Ser Met Leu Pro Pro Met 10 15	250



(2) INFORMATION	FOR	SEQ	ΙD	NO:	130
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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 206 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Muscle

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 33..128

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5

seq VCIVLALCHTSRP/MS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 130:

AAATCTCTTC TAATCCTCCT TAATGCATTT TG ATG GCT TTT CAT AGC TAT TGG 53

Met Ala Phe His Ser Tyr Trp

-30

GGA AAA AGT TTA CAA TCC TTT AAG ACG TTC ATG AGA GTC TGC ATT GTC

Gly Lys Ser Leu Gln Ser Phe Lys Thr Phe Met Arg Val Cys Ile Val

-25 -10

TTG GCC CTT TGC CAC ACA TCC AGA CCC ATG TCT TAC CAT GTT CCC CTG
Leu Ala Leu Cys His Thr Ser Arg Pro Met Ser Tyr His Val Pro Leu

-5

GCT GCT GGC TCC CCA CTC ATG CAC TGG TCT CCT TGT AGT CCT GTG CCC
Ala Ala Gly Ser Pro Leu Met His Trp Ser Pro Cys Ser Pro Val Pro

10
20

TTC ATT GGG
Phe Ile Gly
206

(2) INFORMATION FOR SEQ ID NO: 131:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 184 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney



l	ix	FEATURE:
١		, , , , , , , , , , , , , , , , , , , ,

(A) NAME/KEY: sig_peptide

(B) LOCATION: 113..160

- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.9

seq RFTLLPLVLHSQS/SC

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 131:

ATTTCTCGTA AATGATGAGA TGGGGTTAAA TGGTTTTGCA GAAATATGTG AGAGGTAATG

TGAAATAAGT TACTTTAAGA AGGCCTGGCC CTGGTAATGT CGTTACCAGC TG ATG AAG Met Lys

TTG CGG TTT ACC TTG CTG CCC CTG GTG CTA CAT TCA CAA AGC AGC TGT Leu Arg Phe Thr Leu Leu Pro Leu Val Leu His Ser Gln Ser Ser Cys -10

GTC TTT TGG AAA GCC GGG Val Phe Trp Lys Ala Gly 5

184

(2) INFORMATION FOR SEQ ID NO: 132:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 156 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: 4..93
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.9

seq FIPFLVIYSFVLS/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 132:

ACC ATG ATG ATC ATT CTG GGG TTT GCT TTT TGC CCT GGT CAC TTT AGG 48 Met Met Ile Ile Leu Gly Phe Ala Phe Cys Pro Gly His Phe Arg -25

TIT AAT TIT ATT CCA TIC CIG GIC ATT TAC AGT TIT GIT CIG TCA TCT 96 Phe Ash Phe Ile Pro Phe Leu Val Ile Tyr Ser Phe Val Leu Ser Ser -15

CCC CAT ACC CAT CGA GAA CCC TAT TCT CCT GTG GCA GAC TTT AAT GAA Pro His Thr His Arg Glu Pro Tyr Ser Pro Val Ala Asp Phe Asn Glu 5 15

10

TGT AAC CGC AGT Cys Asn Arg Ser 20

156

(2)	INFORMATION	FOR	SEQ	ID	NO:	133:
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- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 335 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 198..278
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.9

seq CLLSYIALGAIHA/KI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 133:

AACTTTGCCT GGGTGTCTTG CGTTCTGCAC ATTCCGGAGG ACCAGCTTCC CCATCAGA	4G 60
TCTGACTCCA TGGAAACCAG ATGGGGCAAC GGGGTGGTTC TAGTGCAGAC TGTAGCTGC	_
GCTCCTCTCC ACCTCTAGCC TGCTCATTTC CAGCTCAGAA ATTCTACTAA TGGCGTTTT	T 180
TCTTCCTGAA AAAGGAA ATG AAC AGG GTC CCT GCT GAT TCT CCA AAT ATG Met Asn Arg Val Pro Ala Asp Ser Pro Asn Met -25 -20	230
TGT CTA ATC TGT TTA CTG AGT TAC ATA GCA CTT GGA GCC ATC CAT GCA Cys Leu Iie Cys Leu Leu Ser Tyr Ile Ala Leu Gly Ala Ile His Ala -15	278
AAA ATC TGT AGA AGA GCA TTC CAG GAA GAG GGA AGA GCA RRT GCA AAG Lys Ile Cys Arg Arg Ala Phe Gln Glu Glu Gly Arg Ala Xaa Ala Lys 1 5 10 15	326
ACG GGC GTG Thr Gly Val	335

(2) INFORMATION FOR SEQ ID NO: 134:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 323 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR

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(ii'	MOI	LECULE	TYPE:	CDNA
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- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: 195..239
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.8

seg LFLNLPLVIGTIP/LH

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 134:

AATATGTAAA TGTACTATAC AGAATTATAC ATAAAAGAGA AACTTTTCAT GTATGTAAGT 60 TTAAAAATGA AGTAAATGGG GGTTTCAAAT AACATTARAA TTGGTTATGA GTTTTTGAAA AGGAAATCAT ACTTGGCATT CTAAACTTAA TATTTCTTTG CAATGTTTAG GTATATGTGG 180 ATATTCCTGG AGCT ATG GAT TTA TTT CTT AAT TTG CCA CTT GTC ATC GGT 230 Met Asp Leu Phe Leu Asn Leu Pro Leu Val Ile Gly -10 ACC ATT CCT CTA CAT CCA TTT GGT AGC AGA ACC TCA AGT GTA AGC AGT 278 Thr Ile Pro Leu His Pro Phe Gly Ser Arg Thr Ser Ser Val Ser Ser CAG TGT AGC ATG AAT ATG AAC TGG CTC AGT TTA TCA CTT CCT GAA 323 Gln Cys Ser Met Asn Met Asn Trp Leu Ser Leu Pro Glu

(2) INFORMATION FOR SEQ ID NO: 135:

15

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 352 base pairs

20

- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: 11..229
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.8 seq VIRSTLVLSQCLC/SR
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 135:



AAA	ATAT	'TAA	ATG Met	GMA Xaa	AAA Lys	AAT Asn -70	CAC His	AGA Arg	AAT Asn	AAA Lys	AAA Lys -65	TCC Ser	ATA Ile	CAT His	TTT Phe	49
CCA Pro -60	CTG Leu	TGC Cys	ACC Thr	: ATT	CCA Pro	Ser	' AGM ' Xaa	ATG Met	MTG Xaa	AAA Lys -50	Ser	TGT Cys	ACT	CTC Leu	CCA Pro -45	97
CTT Leu	CAG Gln	CGC Arg	ACC Thr	TGG Trp -40	Asp	ATS Xaa	MAT Xaa	CCT Pro	TCC Ser -35	Phe	GTC Val	CAT His	TGG Trp	AWC Xaa -30	CAA Gln	145
GCC Ala	CGY Arg	CTA Leu	CAA Gln -25	TCC Ser	CCA Pro	CCG Pro	YCT Xaa	AGT Ser -20	CAC His	TTA Leu	GTA Val	SCC Xaa	CTC Leu -15	TCG Ser	GTG Val	193
ATC Ile	AGA Arg	TCG Ser -10	ACT Thr	CTC Leu	GTG Val	CTA Leu	TCC Ser -5	CAG Gln	TGC Cys	TTG Leu	TGT Cys	TCA Ser	AGG Arg	MAC Xaa	CCT Pro	241
TAT Tyr 5	TTT Phe	AGT Ser	GCA Ala	ATG Met	ATG Met 10	ACC Thr	CCA Pro	AAG Lys	TGC Cys	AAG Lys 15	AGT Ser	ATT Ile	GMT Xaa	GCT Ala	GGC Gly 20	289
AAT Asn	TCA Ser	GGT Gly	ATG Met	CCA Pro 25	AAG Lys	AGA Arg	AAC Asn	TGT Cys	AAA Lys 30	GTG Val	CTT Leu	CCT Pro	TCA Ser	AGT Ser 35	GAA Glu	337
			GTT Val 40													352

(2) INFORMATION FOR SEQ ID NO: 136:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 370 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 317..358
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.8

seq SFIALVYSSLSFQ/KV

(Mi) SEQUENCE DESCRIPTION: SEQ ID NO: 136:



PCT/IB98/01238 WO 99/06554 104 AGAGCAAAGC AGACAGAAAT TCCTCTGGTT CTGTAGAGCT GACAATTCAT TAATGTGAGG 60 TAGTCAATAA CAAATATATT TTATGTCAAG TGGTGRATGG DTYCDATTGA AGAAAAATGA 120 CTCAATAAGA GGAGAGAAAA TGATGGTATG TGTATGGTGG GTAGGTGTGC GTGATGCTGT TTTGGATAGC GAGGCCTCCG ATTAGATGCT ACGTGAGCAG GGACCCAAAA GAGCCATGTG 240 TTTCATCTAC CTGGGGGAGA AGCCTGCTGG CAGATCCTGT TGAACACTCG TTACCTAAAT 300 CTCTTGCATT GGCTCC ATG TCA TTT ATT GCT CTA GTG TAT TCT TCA CTA TCT Met Ser Phe Ile Ala Leu Val Tyr Ser Ser Leu Ser -10 TTT CAG AAA GTG CCA GGG 370 Phe Gln Lys Val Pro Gly 1 (2) INFORMATION FOR SEQ ID NO: 137: (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 93..158
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.7

seq IVLFLNSXFPIIC/SR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 137:

ATAATATAGA TCTTTAATTT CTCTCAGCAA TGATTATAGT TCACAATGTG GAGGATTTAC ATGTCTTTCA TTAAATTTAT CCAAAGTACT TT ATG GTT TTT GAT ACT TTA AAA 113 Met Val Phe Asp Thr Leu Lys -20 AGT AGA ATT GTT CTT TTT TTA AAT TCG RWT TTC CCA ATC ATT TGC AGC Ser Arg Ile Val Leu Phe Leu Asn Ser Xaa Phe Pro Ile Ile Cys Ser -15 -10 CGG 164 Arg

T/IB98/01238

105	_	PC

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	(i) S	(A) (B) (C)	LEN TYP STR	IGTH: 'E: N ANDE	ACTE 274 UCLE DNES Y: L	bas IC A S: D	e pa CID OUBL	irs							
	(ii)	MOLE	CULE	TYP	E: C	DNA									
	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney</pre>															
	(ix)	(B) (C)	NAM LOC.	ATIO NTIF	Y: s: N: 60 ICAT: NFORM	32 ION 1	44 METH	0 D: '	Von 1 re 4 IFL1	. 7					
	(:	ĸi)	SEQU:	ENCE	DES	CRIP'	rion	: SE	Q ID	NO:	138	:				
AAA	GCAC	AGA	TGGC.	AGTC	CA T	TCAT'	rgaa	G AT	GGTT'	TTTT	TCA	AGGT	GAG '	rgtto	GTCTT	6 0
	CACA	ATG	CTT	GAG	ATG		ATG	ACT	TGG	CTG	AGA	СТА	тст	CAT	GAG	109
TGC Cys -45	TCC Ser	AGA Arg	TGG Trp	GGC Gly	ATG Met -40	GCA Ala	TCG Ser	GCA Ala	TGG Trp	GGT Gly -35	AGG Arg	GGT Gly	GGA Gly	AAG Lys	CTT Leu -30	157
CTT Leu	GGA Gly	GCT Ala	CAA Gln	GTA Val -25	GCC Ala	CTT Leu	CAT His	CCT Pro	AGA Arg -20	AAC Asn	TGC Cys	AGC Ser	AAA Lys	GCT Ala -15	AAG Lys	205
ATC Ile	TTC Phe	CTG Leu	TTC Phe -10	AGT Ser	ATT Ile	TTA Leu	TTA Leu	ATG Met ~5	TCT Ser	TTA Leu	AGA Arg	ACT Thr	TTT Phe 1	CAC His	TGT Cys	25 3
AAT Asn	TAT Tyr 5	TTC Phe	AGA Arg	GGC Gly	AAT Asn	GGG Gly 10										274
(2)	INFC		QUEN	CE C	HARA	ID N CTER 400 CLEI	.ISTI base	CS: pai	rs							

(2) INF

- į)
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: CDNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

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(A) NAME/KEY: sig_peptide
(B) LOCATION: 104..154

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4.7

seq MLFFLGALCRESG/VP

PCT/IB98/01238

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 139:

AACAAAGGAG	GGAAGGGTTA G	AGTGAGGTA CTO	CACCCAGA GA	AAGAGCTGT CCCG	GCCTGG 60
GGGTCCCATT	CGTCCCTTCT C	TTTCTTGCC AAA	AGAGACGG CC	CT ATG GAT GAC Met Asp Asp -15	
				CT GGG GTG CCC er Gly Val Pro 1	
			Tyr Ala Al	CT GAG ATG CCC La Glu Met Pro 15	
				TT CCC AAG CCA eu Pro Lys Pro	
				TC CCC GTG GGG ne Pro Val Gly 50	
				GC CTG GGT CAT ly Leu Gly His 65	
	g Ala Glu Arg			IG TCT CCT GGG al Ser Pro Gly 80	400

(2) INFORMATION FOR SEQ ID NO: 140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: sig peptide

WO 99/06554 PCT/IB98/01238

- (B) LOCATION: 13..87
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: . score 4.6 seq LPTLLLLPVGAPG/KK
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 140:

ATCGAATGCA GA ATG GTT TTG GGA GCC CTG AAC CTT CCC TCC CAG GAA CTC

Met Val Leu Gly Ala Leu Asn Leu Pro Ser Gln Glu Leu

-25

-20
-15

CCC ACT CTC CTG CTC CCA GTG GGG GCA CCT GGR AAG AAA AAA GGC
Pro Thr Leu Leu Leu Pro Val Gly Ala Pro Gly Lys Lys Gly
-10 -5 1

ATG GAA GGC AAA ACT CCC TTG GAC CTG TTT GCT CAT TTT GGC CCT GAG

Met Glu Gly Lys Thr Pro Leu Asp Leu Phe Ala His Phe Gly Pro Glu

5 10 15 20

CCA GGG GAC CAC TCA GAT CCG CTG CCT CCC TCT GCA CCC TCT CCC ACT
Pro Gly Asp His Ser Asp Pro Leu Pro Pro Ser Ala Pro Ser Pro Thr
25 30 35

CGG GAG GGG GCT CTG ACC CCG CCC CCA GGG
Arg Glu Gly Ala Leu Thr Pro Pro Gly
40
45

(2) INFORMATION FOR SEQ ID NO: 141:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 308 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 207..263
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6
 - seq QTFVSFLSIPVLG/LV
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 141:

ATACACCTCC ATTITAAATG TGCTGCAATA TGAATGAAGT GACCTGTGTT TCATCACTTG 60

TTCAAATGAT TCTTATCCAT GTTTTTGTAC TTAGTAAGGG CCATACGTAG TGGGATTAAA 120

TATTTGTGCC CTTGCTTTGA AAACAAAACT GAAAGTGAAT GACACATAAG GGCAGGGATT 180

TCAGAACAGA TTTTCCTTGA ATAAAA ATG CTT GTG TCA AAA ATT CAA ACA TTT

Met Leu Val Ser Lys Ile Gln Thr Phe

-15

GTC TCT TTC CTT TCC ATT CCA GTT CTA GGT CTC GTT CCA GAT CAT ATT

Val Ser Phe Leu Ser Ile Pro Val Leu Gly Leu Val Pro Asp His Ile

-10

-5

CTC CAG CTC ATA ACA GAG AAA GAA ACC

Leu Gln Leu Ile Thr Glu Lys Glu Thr

10

15

(2) INFORMATION FOR SEQ ID NO: 142:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 304 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 188..280
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq LLSTGLNILGTQA/FR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 142:

ATCATAGTCA CTTTCCAAGT TTATGACCCA GAGCAATCTG ACCTTGGTAG CTTGTCTCCC TCATTAAATT CTCTGACTTC ATAATCAGCT CACATTCCCT TCCTCTCTTT CCCTCTCTTT 120 TTAAATATCT GTAAAACATT CAAATTGATC CACGTAGATT TATCTTGCTT TTAGGCCACA 180 CTCTGAG ATG TGT AAT CCG GTT GCT CAC ACA TTT AGA GGA GTC CAT GAG 229 Met Cys Asn Pro Val Ala His Thr Phe Arg Gly Val His Glu -30 -25 CAT CAC GCC ATG CTA CTC TCC ACT GGT TTG AAC ATC TTA GGC ACT CAG His His Ala Met Leu Leu Ser Thr Gly Leu Asn Ile Leu Gly Thr Gln -15 -10GCA TTO CGT TAC GAA GAT GGG CAG CTG 304 Ala Phe Arg Tyr Glu Asp Gly Gln Leu 1



(i)	SEQUENCE	CHARACTERISTICS:
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- (A) LENGTH: 410 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 126..176
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.6

seq ILLWEACTGRCQA/SL

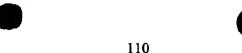
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 143:

TATTCAGTTG GGGGCAAGCC AGCCATGATG TGGACCTTTC ATTGGGTAGG GCAAGTCCCC 60 AAAGTTGGAA AAATGGAAAG TGGGAGCTGT GAGGCACGTG TTACACCCAC ACTTTCCTCC 120 TACAG ATG CAG TGT TGG ATT TTG TTG TGG GAG GCA TGC ACA GGT AGG TGC 170 Met Gln Cys Trp Ile Leu Leu Trp Glu Ala Cys Thr Gly Arg Cys -15 -10 CAG GCC TCC CTA CTC TCT CCC TGG CCC AGA GGT GGC AGG GGC AAG TTA 218 Gln Ala Ser Leu Leu Ser Pro Trp Pro Arg Gly Gly Arg Gly Lys Leu GTG GCA GTG GTG GCT GCA AAA TGG TTG GCA GCA ATC TGT GGG ATT TGG 266 Val Ala Val Val Ala Ala Lys Trp Leu Ala Ala Ile Cys Gly Ile Trp 20 GCT ATC AAA GAA ATG CCA AGC CAT GGC CAC AGT CTT CAA GCA GGG GCA Ala Ile Lys Glu Met Pro Ser His Gly His Ser Leu Gln Ala Gly Ala GGG GAA GGT GCA CTG GTG ACC TGG AGC CTG CAA ACC TCA TTT GGT GTG Gly Glu Gly Ala Leu Val Thr Trp Ser Leu Gln Thr Ser Phe Gly Val 55 AAG CAG TAT AAG TGG GGA GTT GTG TGG CAT GAA GCA AAC CTG TTG CTT 410 Lys Gln Tyr Lys Trp Gly Val Val Trp His Glu Ala Asn Leu Leu 65 70

(2) INFORMATION FOR SEQ ID NO: 144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR



(ii).	MOLECULE	TYPE:	CDNA
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1	$V \perp I$	OKIGII	um.	SOURCE

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 149..223
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.6

seq VLCILGCHGNLCC/EP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 144:

ATTTTAGAAA GTAAGGAAAT AAAACTTTAA TTGAACTTGG AATAAACTCA GTTCTGAGCA

TTCCATTCTA CTCTGCAGTT GTCATTTATA GACAGCTGTG GATCATAATA CCTATAGACT 120

AGATATCGTT ATCTACTTAT TTATATTA ATG ACA GGA TAT CCC TGG GCA AAC 172 Met Thr Gly Tyr Pro Trp Ala Asn -25 -20

AGC ATC ACC ACT GTA CTG TGT ATT CTT GGT TGT CAT GGG AAC CTT TGC Ser Ile Thr Thr Val Leu Cys Ile Leu Gly Cys His Gly Asn Leu Cys -15 -10

TGT GAA CCA GCA GTG AGA GCA CTC GGG 247 Cys Glu Pro Ala Val Arg Ala Leu Gly 1

(2) INFORMATION FOR SEQ ID NO: 145:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 561 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 475..546
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq IFTALFLXLHSVA/IN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 145:



AGGTAAACAA AACAGATGAA AAA	ACTTAGAA ATTTATACTG	ATGTTATCAG AGTAATGTTT	120
AATTTTTCAG ATAATTGTTA TGT	CTAAATT AGCATTTGAT	TTTTCAATTA AGAATTTTTA	180
AATTATCCAA TATTGCAAGC ATA	ATATAGAA ACATGGAAAA	CAACAAAATT CTCATGCATA	240
TACTTCAAAC ACAGAGCTAA CAG	SATGTTAT TATTTTTAT	TTCTTTCACA ACCCAACTTT	300
CGGGAAACAA AATAGGCACA GCA	AAACTGG GATCTCCTCA	TCCCCTTCTC CTTTCTTATA	360
TAAAAGTAAT CCTGCTCTTG GTA	CAGCTAT GTATCATACT	CATCCAGGTT TTAATTTTTC	420
TTATATAACG GAACATATAT GGT	GTTATTT TACGGATTTT	AAAGCTTTAC ATAA ATG Met	477
GTG TCA TGT GAT GTW CVN T Val Ser Cys Asp Val Xaa S -20	CT TAT GTG ATC ATT of the control of	TTT ACT GCA CTC TTT Phe Thr Ala Leu Phe -10	525
TTA WTG CTG CAT AGT GTG G Leu Xaa Leu His Ser Val A -5	CA ATA AAT GAA GAG ' la Ile Asn Glu Glu I	TTT Phe 5	561

(2) INFORMATION FOR SEQ ID NO: 146:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 160 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA

-5

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 80..139
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq LFAIFLMCLKSIG/SV

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 146:

ATGATAAGGG CTTATTCACA TTATTCATTC TTGAATGAAT TTTGATAGTG TCTGTCTTT	C 60
AGGAACTTTG TCCTAAGTA ATG AAA TCC TTT GAT AAA AAG TTG TTT GCA ATA Met Lys Ser Phe Asp Lys Leu Phe Ala Ile -20 -15 -10	112
TIT CTT ATG TGT TTA AAG TCT ATA GGT TCT GTG GTG ATG CCC CAG CCG Phe Leu Met Cys Leu Lys Ser Ile Gly Ser Val Val Met Pro Gln Pro	160



(i) SEOUENCE CHARACTER

- (A) LENGTH: 338 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 36..134
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.5

seq LASLFGLDQXAXG/HG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 147:

ATTT	TTCCI	rcc (CCGC	AACCI	rg gi	"GAA#	AGCCA	YAYI		Sly A		53
				GAT Asp								101
				CTG Leu								149
				GCC Ala 10								197
				CAG Gln								245
				CTG Leu								293
				GTA Val								338

(2) INFORMATION FOR SEQ ID NO: 148:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: NUCLEIC ACID

1238



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	(i:	i) M	OLEC	CULE	TYP	E: CI	ANC	٠								
	(v:		(A) (D)	DEVE	NISN CLOPN	1: Ho MENT <i>i</i>	omo S AL SI : kic	AGE:		al						
	(i)		(A) (B) (C)	NAME LOCA IDEN	TION TIF1	1: 10 CAT	ig_pe)7] [ON N MATIC	190 METHO	D: V	on F e 4. RFLS	5 ~					
	(xi	i) S	EQUE	CNCE	DESC	CRIP	rion:	: SE(O ID	NO:	148:	:				
AAA	GTCAG	CG C	TGGF	AGTCO	GG C	ragg(CGGC:	r gg/	AAAC	GGCG	GCT	GCCG	CCG (GTGA	CTCAGG	60
GAG	GCGGG	AG G	CCGN	1SGGN	1G G <i>1</i>	AGCT(CTTC	C TG	CAGG	CGTG	GARA			GTG (Val 1		115
	CTC (163
	TCC (211
	CGC (259
	CAC A															292
(2)	INFO	RMAT	ION	FOR	SEQ	ID 1	NO: .	149:								
	(i)	SE	OHEN	CE C	HARI	י ארטע	RISTI	rcs.								

(2) INFORM

- (i)
 - (A) LENGTH: 429 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 361..411

114



(C)	IDENTIFICATION	METHOD:	Von	Heijne	matrix
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(D) OTHER INFORMATION: score 4.4

seq LTSVFQAMIWSQG/VS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 149:

ATGAAAACAG	TTTTCTTTGT GA	ATTTGTCAA TT	GATGTTTA	AACAGTGTTT	ATCCTTCCAG	60
GTAGTATGAT	GATGTATTTG TT	GGAGACAA AR	TATTTGCC	CTAGCCTTTT	TACTAATATT	120
TCAGATGAGA	TTCTGTGGAG GA	GAAGCATC TC	CCCAAATG	TCCTTGTTTT	ATAGTAAATA	180
ATTCTACCAC	GAGGATCCTT AT	CCATAAAT CT	ATATTCAT	GTTTATTTTG	TGCTAGATAC	240
AGATCTTGCA	ATATTCATGA AG	CTTTAAGA AG	AGCACTTT	GAATCTTAAA	AGAGATTCTC	300
TGAGCAGGGG	TTGGCAGTGG TG	AGGTCCAG GT	AGTTATAA	TAGCCATAAG	AGCAGGGATT	360
ATG GTT ATT Met Val Ile -15	GAG CTC ACC Glu Leu Thr	AGT GTG TTT Ser Val Phe -10	CAA GCC Gln Ala	ATG ATC TGG Met Ile Trp -5	AGT CAA Ser Gln	408
	GAT TCC TCT Asp Ser Ser					429

(2) INFORMATION FOR SEQ ID NO: 150:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 250 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 47..196
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq ILFLFYFPAAYYA/SR

-35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 150:

ATDCCGCCCT GGAGCA	AGCC GGGGCCTGGT	CGGCARCTGG GCC	GCC ATG GAG TCC Met Glu Ser -50	55
ACG CTG GGC GCG G Thr Leu Gly Ala G -45	GGC ATC GTG ATA (Gly Ile Val Ile . -40	GCC GAG GCG CTA Ala Glu Ala Leu	CAG AAC CAG CTA Gln Asn Gln Leu -35	103



GCC TGG CTG GAG AAC GTG TGG CTC TGG RRT SAC CTT TKC TNG SCG ATC Ala Trp Leu Glu Asn Val Trp Leu Trp Xaa Xaa Leu Xaa Xaa Ile -30 -25 -20	151
CCA AGK ATC CTC TTT CTG TTC TAC TTC CCC GCG GCN TAC TAC GCC TCC Pro Xaa Ile Leu Phe Leu Phe Tyr Phe Pro Ala Ala Tyr Tyr Ala Ser -15 -5 1	199
CGC CGT GTR GGC ATC GCG GTG CTC TGG ATC AGC CTS ATC ACC GAG TGG Arg Arg Val Gly Ile Ala Val Leu Trp Ile Ser Leu Ile Thr Glu Trp 5	247
CTC Leu	250
(2) INFORMATION FOR SEQ ID NO: 151:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 288 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR 	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Heart</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 196270 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4.4</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 151:	
ATNOTGTGTT ACTCATTTCC TGTCTCAGAT ACTTTGGATC CCTTGGTTCT GATCTTTCAG	60
GGGGAGAGGG CATGTTAAGA GGAGTAAGTA GATGGATGAT CTTACACAAT TGAACTCTTC	120
TTACCTCTGG CCTTGTATGC TCTTACATAG GCTGTCCCCT CTCTACATTT TCTTATTTAA	180
GGAAAAACAC AGAAC ATG ATT ATT GTC TCA GAA TTA GGA ACC CCT ACT GGT Met Ile Ile Val Ser Glu Leu Gly Thr Pro Thr Gly -25 -20 -15	231
GTG CTC GTA GGT GTC TTT TTG TCT ACT TTT CTC TAT TGT GAA TGT GTA Val Leu Val Gly Val Phe Leu Ser Thr Phe Leu Tyr Cys Glu Cys Val -10 -5 1	279
AAG GGG CCG Lys Gly Pro 5	288

WO 99/06554



PCT/IB98/0123
PC 1/1B96/0123

(2) INFORMATION FOR SEQ ID NO:	T)	2
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- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 190 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 80..145
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq GFLLCPLVCGLRR/WT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 152:

AGCGTTTATG GCCGCGTTAA GTCTGAGTGC CGCTTTGAGT TGTTGAATGA AGTGAACTTC

ATTTGTCAGC GTTCGGTTC ATG AAC TGG AAT GTA AGA GGC ACC AGA GGA TTC 112 Met Asn Trp Asn Val Arg Gly Thr Arg Gly Phe -20

CTG CTC TGT CCC CTG GTT TGC GGC TTG CGA CGT TGG ACA TCC CCG GAT 160 Leu Leu Cys Pro Leu Val Cys Gly Leu Arg Arg Trp Thr Ser Pro Asp -10

TGT TGT TTA ATA GAG AAA ACT CAC CGC GGG 190 Cys Cys Leu Ile Glu Lys Thr His Arg Gly

- (2) INFORMATION FOR SEQ ID NO: 153:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: CDNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: 49..105
 - (C) IDENTIFICATION METHOD: Von Heijne matrix



(D)	OTHER	INFORMATION:	score 4.4
			sed RGLLLGLAVAAAA/VE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 153:

AAG.	ATAG <i>I</i>	AGG	CGGC	AACC:	rc Go	GAAG'	rgcgo	G AC	GGGT	GGGC	CTA	rata(G AGG 1 Arg	-
TGC Cys	GGA Gly -15	GGC Gly	CGT Arg	GGG Gly	CTT Leu	TTG Leu -10	TTG Leu	GGC Gly	CTG Leu	GCT Ala	GTA Val -5	GCC Ala	GCA Ala	GCA Ala	GCG Ala	105
	AGG Arg															111

(2) INFORMATION FOR SEQ ID NO: 154:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 175 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 95..136
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq ILLMIVFSIFLLL/CN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 154:

ACCCAGAGGC AGAAAGTAAT ATTGCTTACT ATGAGTCTAT ATATCCTGGG GAATTTAAGA 60

TGCCAAAGCA GCTCATTCAC ATACAGCGTA AGTA ATG ATT CTC TTA ATG ATT GTA 115
Met Ile Leu Leu Met Ile Val

TTT TCT ATA TTT CTC TTA TTA TGT AAC TTG ACA GAT TTT TAT CTC TTC

Phe Ser Ile Phe Leu Leu Cys Asn Leu Thr Asp Phe Tyr Leu Phe

AGG AGC GAT GGG
Arg Ser Asp Gly
10



	118	
(A (B (C	ENCE CHARACTERISTICS:) LENGTH: 214 base pairs) TYPE: NUCLEIC ACID) STRANDEDNESS: DOUBLE) TOPOLOGY: LINEAR	
(ii) MOL	ECULE TYPE: CDNA	
(A (D	GINAL SOURCE:) ORGANISM: Homo Sapiens) DEVELOPMENTAL STAGE: Fetal) TISSUE TYPE: kidney	
(B (C	TURE:) NAME/KEY: sig_peptide) LOCATION: 149190) IDENTIFICATION METHOD: Von Heijne matrix) OTHER INFORMATION: score 4.4 seq SLLFIFRSILISC/FS	
(xi) SEQ	UENCE DESCRIPTION: SEQ ID NO: 155:	
ACAATTTGTT TTA	TAAGCCT ATATTAATTG GGTTTTGACT GAATTAATTA TATAACCA	ATT 60
TATCTCAAAA TGA	AATGTTC CATAAAATTT ATTTAAWAGT ATATACTGYA TAAGTGTT	CAA 120
ATTATGAAAT TTA	AGTGGTCT TATAGAGA ATG TCT TTA TTG TTT ATT TTT AGG Met Ser Leu Leu Phe Ile Phe Arg -10	172
	C TCC TGC TTT TCA GGA GAC TTT TTT TTT Le Ser Cys Phe Ser Gly Asp Phe Phe Phe 1 5	214
(2) INFORMATIO	ON FOR SEQ ID NO: 156:	
(A (B (C	ENCE CHARACTERISTICS: 1) LENGTH: 164 base pairs 2) TYPE: NUCLEIC ACID 2) STRANDEDNESS: DOUBLE 3) TOPOLOGY: LINEAR	
(ii) MOI	ECULE TYPE: CDNA	
(A	GINAL SOURCE: a) ORGANISM: Homo Sapiens b) TISSUE TYPE: Dystrophic muscle	
E) (C	ATURE: A) NAME/KEY: sig_peptide B) LOCATION: 2777 C) IDENTIFICATION METHOD: Von Heijne matrix D) OTHER INFORMATION: score 4.3	

seq SKVLIQLSQAFWA/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 156:



ACC	rggt <i>i</i>	ATG :	AATT	ACAA	AA C	rgta <i>l</i>	A ATO	G CC:	TTC Lev	ı Ile	r AG′ ∋ Se:	r AA r Lys	A GTT	TTC Let	G ATA	53
CAG G1n	CTA Leu	AGC Ser	CAA Gln -5	GCA Ala	TTT Phe	TGG Trp	GCC Ala	TCA Ser 1	CCT Pro	GAG Glu	GGT Gly	AGG Arg 5	AAC Asn	AGT Ser	TCT Ser	101
GGG G1 y	AGT Ser 10	AAG Lys	AGG Arg	AAG Lys	CAG Gln	TTG Leu 15	GTA Val	GCT Ala	GCA Ala	GTG Val	GAG Glu 20	ATG Met	CGA Arg	TAC Tyr	TGT Cys	149
	AGG Arg															164

(2) INFORMATION FOR SEQ ID NO: 157:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 465 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 142..228
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3

seq VLLGSTAMATSLT/NV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 157:

AAGTTGTAAT CCCACTAAGA ACCGCCAGGG CGAGACGAAA GCGACATCGC TTCCATCTTT	60
ACGACCAAGA ATCGCCTTCA GCCCTGTCTG GTGCATCCTT GGCAGAAAGT GAGGAGGRAA	120
ACACCCCCAT TGTTCTTTGG C ATG GAC ACA AGT TCA GTG GGA GGA TTA GAA Met Asp Thr Ser Ser Val Gly Gly Leu Glu -25 -20	171
TTG ACT GAT CAG ACT CCT GTT TTA TTA GGG AGT ACG GCC ATG GCA ACT Leu Thr Asp Gln Thr Pro Val Leu Leu Gly Ser Thr Ala Met Ala Thr -15 -5	219
AGT CTC ACG AAT GTA GGA AAC TCA TTT AGT GGT CCA GCT AAT CCT TTA Ser Leu Thr Asn Val Gly Asn Ser Phe Ser Gly Pro Ala Asn Pro Leu 1 5 10	267
GTG TCT AGA TCT AAT AAG TTT CAG AAC TCG TCA GTG GAA GAT GAT	315



Val Ser Arg Ser Asn Lys Phe Gln Asn Ser Ser Val Glu Asp Asp Asp 15 20 25									
GAT GTT GTT TTT ATC GAA CCT GTA CAA CCT CCC CCA CCT TCT GTA CCA Asp Val Val Phe Ile Glu Pro Val Gln Pro Pro Pro Pro Ser Val Pro 30 35 40 45	363								
GTG GTA GCT GAT CAA AGA ACC ATA ACA TTT ACA TCA TCA AAA AAT GRA Val Val Ala Asp Gln Arg Thr Ile Thr Phe Thr Ser Ser Lys Asn Xaa 50 55 60	411								
GAA CTA CAA GGA AAT GAT TCC AAA ATT ACT CCT TCC TCA AAA GAG TTG Glu Leu Gln Gly Asn Asp Ser Lys Ile Thr Pro Ser Ser Lys Glu Leu 65 70 75	459								
GCA TCT Ala Ser	465								
(2) INFORMATION FOR SEQ ID NO: 158:									
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 244 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR 									
(ii) MOLECULE TYPE: CDNA									
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Kidney</pre>									
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 92184 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4.3</pre>									
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 158:									
ACACACGTCC CGCMGTGGAT ACTGGAGAAT CCTTGCCACA CACGTCCTGC CGTGGACACT	60								
GGAGAATCCT TCTCGCCACA CACTTCCCAC C ATG GAC ACT GGA GAA TCC TTC Met Asp Thr Gly Glu Ser Phe -30 -25	112								
TCG CCA CAC ACG TCC TGC CGT GGA CAC TGG AGA ATC CTT CTA CTC ACA Ser Pro His Thr Ser Cys Arg Gly His Trp Arg Ile Leu Leu Leu Thr -20 -15	160								
CAC GTC CCA CCG TGG ATA CTG GAG AAT CCT TCT TGC CAC ACA CGT CCC His Val Pro Pro Trp Ile Leu Glu Asn Pro Ser Cys His Thr Arg Pro -5 1 5	208								
GCC GTG GAC ACT GGA GAA TCC TTC TCG CCA CAA CGG Ala Val Asp Thr Gly Glu Ser Phe Ser Pro Gln Arg 10 15 20	244								



121	INFORMATION	EOD	CEO	TD	110	150
\ 4-/	THIOMETICAL	LOK	350	Tυ	NO:	159:

(i)	SEQUENCE	CHARACTERISTICS:
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- (A) LENGTH: 453 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 154..246
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.3

seq LVLLSVLKEPVSR/SI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 159:

ATAGGACTGC T	ACAAAAACC CCAT	GTTTAC GAATTTGC	CA GTGATATTGC CCCCTTC	CTG 60
TGTCATCCCA A	TTTATGGAT ACGT	PATGGT GCCGTGGG	AT TTATCACAGT GGTAGCT	CGT 120
CAAATAAGTA C	CAGCTGATGT CTAC	Met 1	CCT TAT CTT GAC CCA TAPPO Tyr Leu Asp Pro Tyr -2	
ATT ACC CAA Ile Thr Gln	CCA ATA ATA CAC Pro Ile Ile Glr -20	S ATT GAA AGA AA 1 Ile Glu Arg Ly -15	AA CTT GTT CTG CTC AG ys Leu Val Leu Leu Se -10	222
GTT TTA AAG Val Leu Lys	GAA CCA GTA AG Glu Pro Val Sei -5	CGT TCT ATA TT Arg Ser Ile Ph 1	TT GAT TAT GCT TTG AGG he Asp Tyr Ala Leu Arg 5	G 270
TCT AAA GAT Ser Lys Asp 10	ATT ACT AGC TTO Ile Thr Ser Leu 15	Phe Arg His Le	IT CAC ATG CGT CAG AAG eu His Met Arg Gln Lys 20	318
AAA CGA AAT Lys Arg Asn 25	GGT TCT CTT CCC Gly Ser Leu Pro 30	Asp Cys Pro Pr	CG CCA GAG GAT CCT GCC ro Pro Glu Asp Pro Ala 35 40	ì
ATA GCA CAG Ile Ala Gln	CTT CTG AAG AAG Leu Leu Lys Lys 45	TTG CTC TCA CF Leu Leu Ser Gl 50	AG GGA ATG ACA GAG GAA In Gly Met Thr Glu Glu 55	A 414
GAG GAA GAC . Glu Glu Asp	AAA CTT CTG GCA Lys Leu Leu Ala 60	CTG AAA GAC TI Leu Lys Asp Ph 65	IC ATG ATG ne Met Met	453



(2) INFORMATION FOR S	SEQ	ID	NO:	160
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(i)	SEOUENCE	CHARACTERISTICS:
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- (A) LENGTH: 312 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 181..267
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3

seg VLLGSTAMATSLT/NV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 160:

ARRAAAGCCG GGACTGGACC GAGCGGAGTK KTGCGTGTCG CCGAAGGGGG GTKGGCCGGG 60 GGAGGKGAGG TTCGTTCCGC GGAKCCGCAG YCAGAASCGK GRACCAAGAA TCGCCTTCAG 120 CCCTGTCTKG TGCATCCTTG GCAGAAAGTG RKGAKGAAAA CACCCCCATT GTTCTTTGGC ATG GAC ACA AGT TCA GTG GGA GGA TTA GAA TTG ACT GAT CAG ACT CCT 228 Met Asp Thr Ser Ser Val Gly Gly Leu Glu Leu Thr Asp Gln Thr Pro -25 -20 GTT TTA TTA GGG AGT ACG GCC ATG GCA ACT AGT CTC ACG AAT GTA GGA 276 Val Leu Gly Ser Thr Ala Met Ala Thr Ser Leu Thr Asn Val Gly -10 AAC TCA TTT AGT GGT CCA GCT AAT CCT TTA GTG TCT 312 Asn Ser Phe Ser Gly Pro Ala Asn Pro Leu Val Ser 5

(2) INFORMATION FOR SEQ ID NO: 161:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 182 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE: .
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney



- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 33..116
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.2

seg FGLLDFVVOCCDS/LR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 161:

ATTTTTTATG ACATCTAWTT ATATTGAGTT GC ATG CAT GTT TTG TTC AAC ATA 53 Met His Val Leu Phe Asn Ile

-25

GTC ACA ACA AAT WRR RAT AAC CAT TTT GGG TTG TTA GAT TTT GTT GTG 101 Val Thr Thr Asn Xaa Xaa Asn His Phe Gly Leu Leu Asp Phe Val Val -20

CAG TGT TGT GAT TCA TTA AGA AAC CAT ARG WGG TCA TTT CAG TCA TCT 149 Gln Cys Cys Asp Ser Leu Arg Asn His Xaa Xaa Ser Phe Gln Ser Ser -5

TAC TTG AGG CTA AAT CAT TCA TGR CAT ACA TGT Tyr Leu Arg Leu Asn His Ser Xaa His Thr Cys 15

182

(2) INFORMATION FOR SEQ ID NO: 162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 150..215
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.2

seq TAYWLSFMSWAQS/SS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 162:

ATGTATACTG AGGTTCAGGA ACTGCTGGAG AGATGACTGG GCACCAAGAG GATGACAGTG 60

ACTCAGCTGG CATCCCTTAG CTGGTTCATG GCAGAGCTGA GTGGCCACTC CTGTCTCTGA 120

CCCCAGCTTC AGTGCTCTTT ATCTCCTCC ATG CCT CAG TCG TGC TGT 173 Met Pro Pro Gln Ser Cys Cys Ser

-20

V	VO 99	/0655	4		M			ur*	12	24					PCT/IB98/01238		
AAG Lys	ACT Thr	GCT Ala	TAC Tyr	TGG Trp -10	CTT Leu	TCC	TTC Phe	ATG Met	TCC Ser -5	TGG Trp	GCA Ala	CAG Gln	AGC Ser	AGT Ser 1	TCT Ser	221	
TTT Phe	GGT Gly	AGC Ser 5	AGA Arg	HTT Xaa	GAG Glu	TCC Ser	ACT Thr 10	TCC Ser	CCC Pro	TGC Cys	ACA Thr	GAT Asp 15	CAC His	TGC Cys	TCA Ser	269	
GGA Gly	CCC Pro 20	AGA Arg	GAG Glu	GAG Glu	CAG Gln	CTC Leu 25	TGC Cys	TCC Ser	AGC Ser	AGG Arg	GTT Val 30	TTC Phe	CAT His	TGC Cys	ATC Ile	317	
						ATC Ile										347	
(2)	(2) INFORMATION FOR SEQ ID NO: 163:																
	(i	.) SE	(A)	LENG	TH:	CTER 127 ICLEI	base	pai	rs								

- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 53..94
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2 seq SCVFFHFLQGGLG/FG
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 163:

AACTTTCTTC AAGGCGGTTT GGGATTTGGC TCCGCTGGCC GCTGTGCTGG TG ATG TCC 58 Met Ser TGT GTT TTC TTT CAC TTT CTT CAA GGC GGT TTG GGA TTT GGC TCC GCT 106 Cys Val Phe Phe His Phe Leu Gln Gly Gly Leu Gly Phe Gly Ser Ala -10 -5 GGC CGC TGT GCT GGT GAC AGG 127 Gly Arg Cys Ala Gly Asp Arg 5 10

(2) INFORMATION FOR SEQ ID NO: 164:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 317 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE



(D)	TOPOLOGY:	LINEAR
	10101011	

- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 156..215
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq LILLPIWINMAQI/QQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 164:

AAAC	TCGF	AAC :	rtggi	CGGG	G C	GCGG	ATCC	GAC	SAGG	GAAA	GTC	ATAA	CAA (CCGC	ACGAGO	3	60
GAGI	TCGF	ACT (GGCGF	ACTO	G A	AGGCC	CACGO	CTO	CCTC	CCGC	CTG	ccc	CTC I	AGCC	CTGTGC	G 1	20
CTGG	GGGC	CAG A	AGCTO	CAGAC	CT G1	CTT	CTGA	A GAT	I					Leu S		1	73
			TTG Leu													2	21
			GAT Asp													2	69
			GAT Asp													3	17

- (2) INFORMATION FOR SEQ ID NO: 165:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 205 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: CDNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 50..151
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq SFCNAVVLSPVFQ/EE



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 165:

AAGT	TATA	ACA (SAAGA	ACTTO	GT AC	GAA	GGAT	G GAC	CAAAC	CGTT	CTTA	AAGCO			CG GCC nr Ala	58
CTT Leu	AAC Asn -30	CTG Leu	GTC Val	GCT Ala	CCC Pro	TTT Phe -25	TCT Ser	GAT Asp	GGA Gly	GAC Asp	TCA Ser -20	GGC Gly	AGC Ser	GTC Val	TCT Ser	106
CTA Leu -15	GCT Ala	TCT Ser	TTC Phe	TGC Cys	AAT Asn -10	GCT Ala	GTA Val	GTA Val	CTC Leu	TCT Ser -5	CCA Pro	GTA Val	TTT Phe	CAG Gln	GAG Glu 1	154
GAG Glu	GAG Glu	CAT His	TTG Leu 5	CTA Leu	TTT Phe	CAA Gln	AAA Lys	CGA Arg 10	AAA Lys	ACA Thr	AAA Lys	ACC Thr	TGG Trp 15	CCA Pro	CCC Pro	202
AGG Arg																205

(2) INFORMATION FOR SEQ ID NO: 166:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 270 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 154..204
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq PVQVLGLLATCQH/AP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 166:

AATATGTAAC CAAAAATAAA GTGTTTCAAT AGTTTATTCC TCTTTCATAT AATGGTCTAG	60
AGAGAGTGTC ATTGGGGCAA AGGGCAAAGA TACAGAGGAT CTGTTTCCCT TCTATCTTGT	120
TTTTCTGTAA TCACCTAGAG CAGTGCTACT CAA ATG TGG TCC AGA CCA GTG CAG Met Trp Ser Arg Pro Val Gln -15	174
GTC TTG GGA CTT CTT GCC ACT TGT CAG CAT GCT CCC TCT CCC TCT TTT Val Leu Gly Leu Leu Ala Thr Cys Gln His Ala Pro Ser Pro Ser Phe -10 -5 1 5	222
AAA GGT GAG ACA TGT ACA GAA ATT GAG AGT GTT TAT CTG GCC CCC ATG	270

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Lys Gly Glu Thr Cys Thr Glu Ile Glu Ser Val Tyr Leu Ala Pro Met
10 15 20

(2) INFORMAT	ION	FOR	SEO	ID	NO:	167:
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- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 208 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 125..196
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq SLNQILLFLLISC/RT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 167:

TACTGTGGTA AGCACTTAGT AATGCAAAGT ATTGTTATTC TAATTATTTC CAATAAGAAT 60

AGTGCCTTTT ATTGGGGAAA GAGTCTACTT GGCTGATCAC AACAAGAGGT TTATTTCTTC 120

CTCC ATG AGG TAC CGG TTA AGG ATT CAA ATC ACA ACA TCC CTC AAT CAG

Met Arg Tyr Arg Leu Arg Ile Gln Ile Thr Thr Ser Leu Asn Gln

-20

-15

ATC CTG CTA TTC TTA CTG ATA AGT TGT AGG ACC TTG AGC

11e Leu Leu Phe Leu Leu Ile Ser Cys Arg Thr Leu Ser

-5

- (2) INFORMATION FOR SEQ ID NO: 168:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 375 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: CDNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 271..345

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(C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4.2 seq VLLFFCCSPLYSP/LF	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 168:	
ATGTAATGGA AGCAATCATT TTGAAAAGAG TTAAAGTTTT TTGGTAAGTC AAATAAGGAT	60
CAATGCTGCT GAAAGCTGGG ACAACACACG GGCCCTGACC AAATTGGGGT TTCTTTGTCT	120
ACCTCATACC TTCCAAATCA AAAAATAATT TCCCTAGTAT TTTAATTACT CCCCCAAATC	180
AGGAATAACT TCCTCACTGT GCTGATTTTG GTTCTTTTAA AATAAGGTGG TAATTTGAAG	240
GTAATAGTTA AACCAGTCAT AGATTATTCT ATG CCA TTC TTT TCA AAT CAG CCC Met Pro Phe Phe Ser Asn Gln Pro -25 -20	294
ACT CAG GTG TCA GTC CTA CTT TTC TTT TGT TGT AGT CCT CTT TAT TCT Thr Gln Val Ser Val Leu Leu Phe Phe Cys Cys Ser Pro Leu Tyr Ser -15	342
CCT TTG TTT CTG CTC CAV CTC ATC CCC CAC CAG Pro Leu Phe Leu Leu Xaa Leu Ile Pro His Gln 1 5 10	375
(2) INFORMATION FOR SEQ ID NO: 169: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 376 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 32163 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4.1	
seq IAVGLTCQHVSHA/IS	
GCTGCGGCCC GGCCCGGCGG GTAAATAACA G ATG CGG GTG AAA GAT CCA ACT Met Arg Val Lys Asp Pro Thr -40	52
AAA GCT TTA CCT GAG AAA GCC AAA AGA AGT AAA AGG CCT ACT GTA CCT	100

Lys Ala Leu Pro Glu Lys Ala Lys Arg Ser Lys Arg Pro Thr Val Pro

-25

-30

-35

									Α.	_,						
CAT His	GAT Asp -20	GAA Glu	GAC Asp	TCT Ser	TCA Ser	GAT Asp -15	GAT Asp	ATT Ile	GCT Ala	GTA Val	GGT Gly -10	TTA Leu	ACT Thr	TGC Cys	CAA Gln	148
CAT His -5	GTA Val	AGT Ser	CAT His	GCT Ala	ATC Ile 1	AGC Ser	GTG Val	AAT Asn	CAT His 5	GTA Val	AAG Lys	AGA Arg	GCA Ala	ATA Ile 10	GCT Ala	196
GAG Glu	AAT Asn	CTG Leu	TGG Trp 15	TCA Ser	GTT Val	TGC Cys	TCA Ser	GAA Glu 20	TGT Cys	TTA Leu	AAA Lys	GAA Glu	AGA Arg 25	AGA Arg	TTC Phe	244
TAT Tyr	GAT Asp	GGG Gly 30	CAG Gln	CTA Leu	GTA Val	CTT Leu	ACT Thr 35	TCT Ser	GAT Asp	ATT Ile	TGG Trp	TTG Leu 40	TGC Cys	CTC Leu	AAG Lys	292
TGT Cys	GGC Gly 45	TTC Phe	CAG Gln	GGA Gly	TGT Cys	GGT Gly 50	AAA Lys	AAC Asn	TCA Ser	GAA Glu	AGC Ser 55	CAA Gln	CAT His	TCA Ser	TTG Leu	340
AAG Lys 60	CAC His	TTT Phe	AAG Lys	AGT Ser	TCC Ser	AGA Arg	ACA Thr	GAG Glu	CCC Pro	CTC Leu	AGG Arg					376

(2) INFORMATION FOR SEQ ID NO: 170:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 152 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR

65

- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 9..140
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1

seq GTYLTSSSPLCQL/QP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 170:

ACTTTAAT	ATG GTG T Met Val S	CC TTG GG Ser Leu Gl -4	y Tyr Tyr Le	TA ATA TTT GTC CTA TAT eu Ile Phe Val Leu Tyr -35	CTT 50 Leu
TGG CTT Trp Leu	TGT TTC AT Cys Phe Me	G CAA ATT t Gln Ile -25	AGT GAA GAO Ser Glu Glu	G AAG TTA ATA GAG GAA (1 Lys Leu Ile Glu Glu -20	CAC 98 His -15
ACA GGT . Thr Gly	ACA TAT TI Thr Tyr Le	A ACC TCC u Thr Ser	AGT TCA CCC Ser Ser Pro	C CTC TGC CAG CTC CAG (CCC 146 Pro

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1

-10 -5

CCA GGG . 152 Pro Gly

(2) INFORMATION FOR SEQ ID NO: 171:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 259 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 128..232
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1

seq VLCCLLIATPTFF/LL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 171:

ATATTATAA ACTTTTATT TTGAGGTTAG TGTGGATTGA AATACACTTC CAACAATTAA 60 CACAAAGGTC CCCTGTGTCC TTTACCCAGT TTTCCACAAT GGTAACATCT TACAAAACTG 120

GAGTACA ATG TCA CTC ACA TCC AGG RTA MYA ATW ATG GWT ACA ATC AAG

Met Ser Leu Thr Ser Arg Xaa Xaa Ile Met Xaa Thr Ile Lys

-35 -30 -25

ATA CAG AAT ATT TCT ATT ACA AAG GTC TTG TGT TGC CTT CTT ATA GCA

11e Gln Asn Ile Ser Ile Thr Lys Val Leu Cys Cys Leu Leu Ile Ala

-20

-15

-10

ACA CCT ACT TTC TTC CTA CTC CTT CCC TCA TCC ATT CCA CGG
Thr Pro Thr Phe Phe Leu Leu Pro Ser Ser Ile Pro Arg
-5

(2) INFORMATION FOR SEQ ID NO: 172:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 217 base pairs
 - (3) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:

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	(D) DEVE	NISM: Homo LOPMENTAL S UE TYPE: kid	TAGE: Fetal		
(ix	(C) IDEN	/KEY: sig_perion: 137 FIFICATION NOTES INFORMATION	190 METHOD: Von DN: score	Heijne matrix 4.1 VVSTSVAAAVA/AV	
(xi	SEQUENCE	DESCRIPTION:	: SEQ ID NO	: 172:	
AAGCGCAAC	C GGAACTAGC	C TTCTGGGGG	CGGCTTCCT	T TATCTCTGGC GGCCTTG	TAG 60
				C CCTAGGTTTG ATTGCCC	
CCCCGAAACA	A ACTATC ATO	G ARC GCC GA Xaa Ala Gl -1	u Ala Ala (GGT GTT GTC TCC ACC Gly Val Val Ser Thr -10	TCG 172 Ser
GTG GCC GC Val Ala Al -5	CG GCT GTT (a Ala Val <i>I</i>	GCT GCT GTC Lla Ala Val 1	Ala Ala Pro	F GCT GGG GCC GGG O Ala Gly Ala Gly	217
(2) INFORM	ATION FOR S	EQ ID NO: 1	73:		
(i)	(A) LENGT (B) TYPE: (C) STRAN	ARACTERISTI H: 196 base NUCLEIC AC DEDNESS: DOI OGY: LINEAR	pairs ID		
(ii)	MOLECULE T	YPE: CDNA			
(vi)	ORIGINAL S (A) ORGAN (F) TISSU	OURCE: ISM: Homo Sa E TYPE: Musc	apiens cle		
(ix)	(B) LOCAT:	KEY: sig_per ION: 10114 IFICATION ME INFORMATION	15 ETHOD: Von 1: score 4	Heijne matrix SCLALTYTNS/IS	
(xi)	SEQUENCE D	ESCRIPTION:	SEQ ID NO:	173:	
TTGGTATCTG	GAGTGTTGTA	GTGTGTTTGT	ATTTGCTTAT	AAATAAGTAT TATAGATA	AA 60
			GGAAAATTTC	ATG TGG ATA ATG TCA Met Trp Ile Met Ser -15	115

TCC TGT CTG GCA TTG ACA TAC ACA AAT TCA ATC TCA CAT AGT CTT TGC Ser Cys Leu Ala Leu Thr Tyr Thr Asn Ser Ile Ser His Ser Leu Cys

1

-5

-10

163

CTT GAG AGA GCG TAC AGT CTA TTC AAA GTT GAC Leu Glu Arg Ala Tyr Ser Leu Phe Lys Val Asp 10 15	196
(2) INFORMATION FOR SEQ ID NO: 174:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 214 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR 	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 65124 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 174:	
ACAGTGTGGC TCGGTTGAAT AGGAGAGCTT TAACTGCATT CTCTTGTGAG AATGCAGTBG	60
AAGA ATG CCA AGA GGA GTG TAC AAT TCA AAT GCG TTA GTG CTT GTA ACA Met Pro Arg Gly Val Tyr Asn Ser Asn Ala Leu Val Leu Val Thr -20 -15 -10	109
CGT GGT TCC AGT TCT CTC CCT CTT GGC TTG TAT GGT ATA AAT TGT GTA Arg Gly Ser Ser Ser Leu Pro Leu Gly Leu Tyr Gly Ile Asn Cys Val -5 1 5 10	157
CAG GTA ATT AAG TTA TTT TAT AGA GGC CAT CTC CAC TGG GAA ACT TTG Gln Val Ile Lys Leu Phe Tyr Arg Gly His Leu His Trp Glu Thr Leu 15 20 25	205
CTG CCA TCG Leu Pro Ser 30	214
(2) INFORMATION FOR SEQ ID NO: 175:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 353 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR 	

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:(A) ORGANISM: Homo Sapiens(D) DEVELOPMENTAL STAGE: Fetal(F) TISSUE TYPE: kidney	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 210341 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 175:	
AATTTATGAT AGGAAATGAT TGATCAAGTG TCACACAGCT GATTATCAGG TCTCAGTCTA	60
ATATTTATTC CTTATTGGTC TCTGCTTAAC TTCAAGTAGG TTATAGATTC CTTAATGGAC	120
TGATAGTTTA TGTCTTATAG CTTTACCTTT CAGGCGCTTA GTTTCATATT GGGAACATGA	180
CAAGTGAATA ATAAATACAT GATAGCTCT ATG ATT GAA CCC TGT GAG AAA ATG Met Ile Glu Pro Cys Glu Lys Met -40	233
AAG CAT TAT GAT ATG AAT TGG TTT CTG TGT ATG TAT GAG TGT TTT TTT Lys His Tyr Asp Met Asn Trp Phe Leu Cys Met Tyr Glu Cys Phe Phe -35 -25	81
TTY CAT CTT TTG GAA ACA GAA TTT CTG CTC CCC TGT GTA CAC CCT TTC Phe His Leu Leu Glu Thr Glu Phe Leu Leu Pro Cys Val His Pro Phe -20 -15 -10 -5	329
TCT GTA ATT GCA GTG TAT GTT TTT Ser Val Ile Ala Val Tyr Val Phe 1	353
(2) INFORMATION FOR SEQ ID NO: 176:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 307 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR 	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Muscle</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 134298 (C) IDENTIFICATION METHOD: Von Heijne matrix</pre>	

seq AALCGISLSQXFP/EP

(D) OTHER INFORMATION: score 4

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 176:	
AGCCTCCGCC TTTGCCTTCG CAGCCGCCTC CAGGGCAATT TGCATATTTC TCCAAAGAAC	60
CATCCAGAAC CTGAGCAGCC TGTCTTCAGA CAGAGATAGG CCCACGGCTG TTTCTTGAAA	120
TCTGGCGCTG GGA ATG GCC ATG TGG AAC AGG CCA TGC CAG ARG CTG CCT Met Ala Met Trp Asn Arg Pro Cys Gln Xaa Leu Pro -55 -50 -45	169
CAG CAG CCT CTG GTA GCT GAG CCC ACT GCA GAG GGG GAG CCA CAC CTG Gln Gln Pro Leu Val Ala Glu Pro Thr Ala Glu Gly Glu Pro His Leu -40 -35 -30	217
CCC ACG GGC CGG GAG CTG ACT GAG GCC AAC CGC TTC GCC TAT GCT GCC Pro Thr Gly Arg Glu Leu Thr Glu Ala Asn Arg Phe Ala Tyr Ala Ala -25 -20 -15	265
CTC TGT GGC ATC TCC CTG TCC CAG TKA TTT CCT GAA CCG GGG Leu Cys Gly Ile Ser Leu Ser Gln Xaa Phe Pro Glu Pro Gly -10 -5 1	307
(2) INFORMATION FOR SEQ ID NO: 177: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 189 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 130180 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4 seq CLLVSYAVDSAAG/RF (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 177:	
ATTGTCAAAA AGACATCAAA CTCAACTTCT GGGAAGACAG ATTTTTAATA CACATACTTG	60
GCTAATACTC ACAAACATAT CTAAAGTTTT GGCAAAATTA TGAGGGTGAT GGGTKGGTAC	120
TAACCTGGC ATG GAG CAG GTG TGT CTT TTG GTT TCT TAT GCA GTT GAC TCT Met Glu Gln Val Cys Leu Leu Val Ser Tyr Ala Val Asp Ser -15 -10 -5	171

GOT GCA GGG AGA TTC GGG Ala Ala Gly Arg Phe Gly

	- -					
(2)	INFORMATION	FOR	SEQ	ΙD	NO:	178:

(i)	SEQUENCE	CHARACTERISTICS:
\ - /		CHARACTERISTICS

- (A) LENGTH: 364 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 20..103
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4

seq ATLRCWASTPVSG/RL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 178:

ACA	AAGA	GGC .	AGCT	CCGG.	A AT	G AG	A AAG g Ly:	G AT. s Il-	e Se	C CA	C TG s Cy	C CT	C CAG u Hi: -20	s Cy	C TGG s Trp	52
CCC Pro	GAG Glu	TCG Ser -15	GGG Gly	GCA Ala	ACA Thr	TTG Leu	AGG Arg -10	TGC Cys	TGG Trp	GCT Ala	TCA Ser	ACA Thr -5	CCC Pro	GTC Val	AGC Ser	100
GGA Gly	AGG Arg	CTT Leu	TCC Ser	TCA Ser	ATG Met 5	GCT Ala	GTK Val	RWG Xaa	SSG Xaa	CKG Xaa 10	GGG Gly	GAA Glu	AKG Xaa	CCA Pro	CCA Pro 15	148
CAG Gln	GAT Asp	GCC Ala	TTC Phe	ACC Thr 20	ACA Thr	CAG Gln	TGG Trp	CTG Leu	GTG Val 25	CGG Arg	GAC Asp	CTG Leu	AGG Arg	GGC Gly 30	AAG Lys	196
ACT Thr	GAG Glu	AAG Lys	GAG Glu 35	TTT Phe	AAG Lys	GCC Ala	TAT Tyr	GTG Val 40	TCT Ser	TTG Leu	TTC Phe	ATG Met	CGC Arg 45	CAT His	CTG Leu	244
TGT Cys	GAG Glu	CCT Pro 50	GGG Gly	GCA Ala	GAC Asp	GGC Gly	TCT Ser 55	GAA Glu	ACC Thr	TTT Phe	GCC Ala	GAT Asp 60	GGG Gly	GTC Val	CCT Pro	292
CGG Arg	GAG Glu 65	GGA Gly	CTG Leu	AGT Ser	CGC Arg	CAG Gln 70	CAG Gln	GTG Val	TTG Leu	ACC Thr	CGC Arg 75	ATT Ile	GGA Gly	GTC Val	ATG Met	340
TCT Ser 80	CTC Leu	GTC Val	AAA Lys	AAG Lys	AAG Lys 85	GGG Gly	CAG Gln									364

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(2) INFORMATION FOR SEQ ID NO: 179	(2)	INFORMATION	FOR	SEQ	ΙD	NO:	179
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í	(i '	SECUENCE	CHARACTERISTICS:
١) SECOUNCE	CHWINGI FUTDITICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: 172..237
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seq LLHPCGSITLTSS/ST

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 179:

AAAATTTTTT TAGCCTCTAA CATGAAAGGG TCTCTTCATT GTCTCATTT GTCTTACCCG 60 CCATCCAGTG TTAAGCAGTA TGTTAAAGAG CTTCTTCTTT ACAACTTTTC CCCTCACATT ATTTTYCTAC ATGCAGCAAC TTCTTTAACC AAGTTGTTTG ATTAGGAGTA A ATG TGC 177 Met Cys ATA AAC GAT CAT ATT ATT AAG CTT CTG CAC CCA TGT GGC AGC ATC ACT 225 Ile Asn Asp His Ile Ile Lys Leu Leu His Pro Cys Gly Ser Ile Thr -20 -10 -5 TTA ACT TCT TCC TCA ACC ACA CGG 249 Leu Thr Ser Ser Ser Thr Thr Arg

(2) INFORMATION FOR SEQ ID NO: 180:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 269 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 135..185
 - (C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4 seq VALQCGLTIPALX/LP	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 180:	
AGAAGGGGTG TCAAACTCCA ATGGAAAAGG TTTAGGAAAA GACCTTTTAC AAATCCAAAG	60
ATGTTTCACA GTGGGCGAGG CTGGTGTGGC GACAGTAGTG GCCCACATGG CTGGGTTGGG	120
AGCCAGCTCT GCCC ATG AGG TGC CGT GTG GCT TTG CAG TGT GGC CTC ACA Met Arg Cys Arg Val Ala Leu Gln Cys Gly Leu Thr -15 -10	170
ATC CCA GCT TTG TNT CTT CCC CAG GGA GAT GAG GCT GGT GAT GCT CAA Ile Pro Ala Leu Xaa Leu Pro Gln Gly Asp Glu Ala Gly Asp Ala Gln -5 1 5 10	218
GAT CTC AGA GGC CCT GCC CAG GCT GAG TAT CTG TAT ATA ATA TCC CCC Asp Leu Arg Gly Pro Ala Gln Ala Glu Tyr Leu Tyr Ile Ile Ser Pro 15 20 25	266
TCG Ser	269
(2) INFORMATION FOR SEQ ID NO: 181: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 441 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 88.366 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: SCORE 3.9 SEQ_LTSAFLWLPRLHI/SV (xi) SEQUENCE DESCRIPTION: SEQ_ID_NO: 181:	
ATATAACTCA GTTTTCTGTT GTCTTTAGCT ACTGATGCAA ATGTGAAGAA TGAAAGTCTT	60
TCATCTGTGC AGCAGCTTGG CATTAAA ATG ACT GTC AGG TAT GGC AAA TTC CTC Met Thr Val Arg Tyr Gly Lys Phe Leu -90 -85	114
AGT CTC TTA AAA GAT GGT GCA GAA AAT GAT CTT ACC TGG GTT TTA AAG	162

Ser Leu Leu Lys Asp Gly Ala Glu Asn Asp Leu Thr Trp Val Leu Lys

-75

-70

-30

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			AAA Lys					210
			AAT Asn					258
			TTG Leu -30					306
			CTT Leu					354
			AGA Arg					402
			TAC Tyr					441

(2) INFORMATION FOR SEQ ID NO: 182:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 261 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 160..219
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq FFWVVLFSAGCKV/IT

222

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 182:

AACAGAGCCA	CAGAATGCTG	AGCAGTCAAC	AGCATTTCTT	GTTCCAA	GAT	CACCCT	TCTG	60
AGTACCTCTC	TGGCTGCCAA	ATTGCCAGGG	CCTTCACAGT	TTGATTC	CAT	TTCTCA	GCTC	120
CAAGCATTAG	GTAAACCCAC	CAAGCAATCC		ATG GCG Met Ala -20			_	174

ASC TGC TTC TTT TGG GTG GTG CTG TTT TCT GCC GGC TGT AAA GTC ATC

Ser Cys Phe Phe Trp Val Val Leu Phe Ser Ala Gly Cys Lys Val Ile -15 -10 -5 1

ACC TCC TGG GAT CAG ATG TGC ATT GAG AAA GAA GCC ACA

Thr Ser Trp Asp Gln Met Cys Ile Glu Lys Glu Ala Thr

5 10

(2) INFORMATION FOR SEQ ID NO: 183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 167..232
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.9

seq HLSSTTSPPWTHA/AI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 183:

AAAAACGCCT TGAGGATAAG GAAGGAGAAT CAGCAAGTCC CGAGTTCCTA CGGTGTGTCA 60 GCATCGTGCT CCCACTCCCG GGAGAGAGGC ATTATCTTCA GTTTACAAAA GGGGAAAACA 120 GGTCTGGGGT TTCCAGAGTC CGCGGTTTTG CTAAGAAGCC GCAGTG ATG TTG ACG 175 Met Leu Thr -20 CGG CTG GTC CTC AGT GCA CAC CTG AGT AGC ACG ACC TCT CCG CCC TGG Arg Leu Val Leu Ser Ala His Leu Ser Ser Thr Thr Ser Pro Pro Trp -15 -10 ACG CAC GCT GCC ATC AGC TGG GAG CTG GAC AAC GTG CTG ATG CCT AGT 271 Thr His Ala Ala Ile Ser Trp Glu Leu Asp Asn Val Leu Met Pro Ser CCC AGA ATC TGG CCC CTG 289 Pro Arg Ile Tro Pro Leu 15

(2) INFORMATION FOR SEQ ID NO: 184:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 478 base pairs
 - (B) TYPE: NUCLEIC ACID

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(C)	STRANDEDNE	SS:	DOUBLE
(D)	TOPOLOGY:	LINE	AR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 326..445
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.9

seq CVNLLLGFEPVIS/RS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 184:

ATAAAACTTA GGGGGAAGAT TT	GCCTCTCA CTTTTTTCT	TGGAAAATGT GGGCAGCAAT	60
TTTAAAGAGA ACATGAAAAT GG	AGTAGGTT GAAACCAACA	TTCAGAACTT CCTTTCATGG	120
ATTGAAACTT AAAGCTGAGG GA	GGKTTTRA GGGTGGARKT	RAGGAAGGC TAGAAGATAG	180
CAAATTTCAG AGTCATATCA GA	GAATATGA ACTGTCAGTG	TTTCCAATGT TTCTCTTGGC	240
TCTGCACAGC ACTTCCAAGC CC	TTTTGCTC ACTGTTTTGC	TTCTGCCACA CCTAGGAGAA	300
GATTCAGAGC TTGCTGAGGC AA		CAA GGG CCT TCC CCC Gln Gly Pro Ser Pro -35	352
TAT TCT GAA ATA GAA ATT (Tyr Ser Glu Ile Glu Ile (-30	Glu Leu Cys Asp His	GTG TAT TCA TTC CAA Val Tyr Ser Phe Gln -20	400
GGT CTA TGT GTT AAC CTT : Gly Leu Cys Val Asn Leu : -15 -10	TTG CTA GGA TTT GAA Leu Leu Gly Phe Glu -5	CCT GTT ATT AGT AGG Pro Val Ile Ser Arg 1	448
AGC CGR MGC AGT TCA CTT of Ser Arg Naa Ser Ser Leu 6			478

(2) INFORMATION FOR SEQ ID NO: 185:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal

PCT/IB98/01238

(F) TISSUE TYPE: kidney

(i:	∢)	FEA'	TUI	RE:
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- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 48..170
- (C) IDENTIFICATION METHOD: Von Heijne matrix

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(D) OTHER INFORMATION: score 3.9

seq LASLECYVPSTNQ/WQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 185:

ACT	GCAG	ATA (CGAT	CCC	GC T'	rcaa(CACC'	r gg	ATAC	ACCT	GGC	CAGS		AAN Xaa -40		56
AAG Lys	CGC Arg	ACG Thr	CAC His -35	TKV Xaa	VNS Xaa	STG Xaa	AGC Ser	GTG Val -30	TTC Phe	AAC Asn	GGG Gly	CTC Leu	GTG Val -25	TAC Tyr	GCC Ala	104
GCG Ala	GGC Gly	GGC Gly -20	CGC Arg	AAC Asn	GCA Ala	GAA Glu	GGA Gly -15	AGC Ser	CTG Leu	GCC Ala	TCG Ser	CTG Leu -10	GAG Glu	TGC Cys	TAC Tyr	152
GTG Val	CCC Pro -5	TCC Ser	ACC Thr	AAT Asn	CAG Gln	TGG Trp 1	CAG Gln	CCG Pro	AAG Lys	HHN Xaa 5	SCC Xaa	CTG Leu	GAG Glu	GTG Val	GCG Ala 10	200
CGC Arg	TGC Cys	TGC Cys	CAC His	GCT Ala 15	AGC Ser	GCG Ala	GTC Val	GCC Ala	GAC Asp 20	GGC Gly	CGC Arg	GTG Val	CTG Leu	GTG Val 25	ACC Thr	248
	GGC Gly															257

(2) INFORMATION FOR SEQ ID NO: 186:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 377 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 249..362
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq LLFFHLLLNDFFT/FY

(Mi) SEQUENCE DESCRIPTION: SEQ ID NO: 186:

Leu Leu Glu Leu

PCT/IB98/01238 142 ACATCCAGCT CTGGTAGTTT AGGCTCAATC TTACGGTGTA ATTATACAGA ATAATTAGAG 60 GCAGCTGTAT CCTTGTTTCT GATTTTAAAA TCTGRATGTT TCTYCAATTC TTTGTGTACT 120 CTCCCTTCAT TTGGTACATA TAGAAGTCTT CTTATGTGTT ATTAAAGTCT TCTAAGATAG 180 TATTCTGGTC ATTGGAGACA CCAAAAATCT ATGGGCACAG TCCTGTTCCT GTTTCTTTTG 240 CCAATAGA ATG TTC CTT AAG GTT CAG TCA CAG TCC TTT TAC DTC CCT TAC Met Phe Leu Lys Val Gln Ser Gln Ser Phe Tyr Xaa Pro Tyr -35 -30 AGA GAT TGT TTA AAT TTC CAC AAA AGC ACG TAT TTA CTC TTC TTT CAC 338 Arg Asp Cys Leu Asn Phe His Lys Ser Thr Tyr Leu Leu Phe Phe His -20 -15 TTG TTA CTA AAT GAC TTC TTC ACA TTT TAC NTT GCT AAA 377 Leu Leu Leu Asn Asp Phe Phe Thr Phe Tyr Xaa Ala Lys -5 (2) INFORMATION FOR SEQ ID NO: 187: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 226 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Muscle (ix) FEATURE: (A) NAME/KEY: sig peptide (B) LOCATION: 119..199 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.9 seg WIILIIYTFQCNS/SL (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 187: CAGAATGTTC TTTGCTGCCT CGCTTACATG GCAAAACTCA CAAACCACCT ATACAATCCA 60 AAAGAGGGGA AACAGCTCAT CTCATATTAA TTATGGTCCA TTTCBATGAT AGGATATT 118 ATG CAA CCA TTA AAA ATC ATA TTT TAT CTG AGT GTT AGT ATA TGG ATT 166 Met Gla Pro Leu Lys Ile Ile Phe Tyr Leu Ser Val Ser Ile Trp Ile ATT TTA ATT ATT TAT ACT TTT CAG TGT AAT TCT TCT CTG AGC ATA CTA The Let Ile The Tyr Thr Phe Gln Cys Asn Ser Ser Let Ser Ile Let -10-5 · CTT TIS GAG TTA

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(i) SEOUENCE	CHARACTERISTICS	

- (A) LENGTH: 192 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 10..66
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seg RVAACTAAAPLQA/HG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 189:

AAGTGATGG ATG ATG AGA ACG ACA GCG AGA GTC GCT GCG TGT ACT GCT GCA 51

Met Met Arg Thr Thr Ala Arg Val Ala Ala Cys Thr Ala Ala

-15

-10

GCC CCA TTG CAA GCC CAC GGT GCA GRC ATT CAG CAG GRT CCA GAC AGS
Ala Pro Leu Gln Ala His Gly Ala Xaa Ile Gln Gln Xaa Pro Asp Xaa
-5 1 5 10

CTC TGS TCT RGA AGG CTC AGC AGA GRR GGR CTT TCT GCA GGG CGR CTG
Leu Xaa Ser Xaa Arg Leu Ser Arg Xaa Gly Leu Ser Ala Gly Arg Leu
15 20 25

CAC CAR AGC GAA ACA GAA GCT GAA CTG GAR GCC CCG GGT CGC GCG
His Gln Ser Glu Thr Glu Ala Glu Leu Glu Ala Pro Gly Arg Ala
30
35
40

(2) INFORMATION FOR SEQ ID NO: 189:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 274 base pairs
 - (3) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide

WO 99/0655	144	PCT/IB98/012	3
	(B) LOCATION: 140241 (C) IDENTIFICATION METHOD: Von He (D) OTHER INFORMATION: score 3.8 seq RWASS		
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 1	189:	
AASCCCAASG	TGCTGCCGTT GCCCGTACAA CTCGGACTTG	CTGTTGCTCG AGCCGCGTCT 60	
GCACGGGTCT	CGGACCGAGC GGAGTCCMAG CCTCGGTCCC	GGAGCCCACC TTCGCCTCGC 120	
CCTTGCCCAG	CCTGCGGTG ATG GAG GCG GCC ACC ACA Met Glu Ala Ala Thr Thr -30		
CGC CCG GCC Arg Pro Ala	G CTG CCC CTC GGG GCC CGG GCC CGC T Leu Pro Leu Gly Ala Arg Ala Arg 7 -20 -15	IGG GCG AGT TCC TGC 220 Irp Ala Ser Ser Cys -10	
CTC CAC CCC Leu His Pro	G AGT GCC CGG TCT TCG AAC CCA GCT (D Ser Ala Arg Ser Ser Asn Pro Ala (D 1	GGG AAG AGT TCG CGG 268 Gly Lys Ser Ser Arg 5	
ACC CCT Thr Pro 10		274	
(2) INFORM	ATION FOR SEQ ID NO: 190:		
(i) S	EQUENCE CHARACTERISTICS: (A) LENGTH: 196 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR		
(ii)	MOLECULE TYPE: CDNA		
(vi)	ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Kidney		
(ix)	FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 92178 (C) IDENTIFICATION METHOD: Von He (D) OTHER INFORMATION: score 3.8 seq LCPVI	eijne matrix B FFPSNCWK/EY	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 1	190:	
AAGAAAGGAC	ATTTTTTTT TCTTGTACTA ACTAGGCTGG	ATTYYCCAAA TTGTTTGAGT 60	
GGCCCCTGCC	CCTCTTAATG CTTCTGTAAG A ATG CAA GO Met Gln G	GT GTC AGG GGA CCT 112 ly Val Arg Gly Pro -25	

GTG TOO TIT TOO TGG AGC ACA ACC ATG TTG TGT CCT GTT ATA TTC TTT

Val Ser Phe Ser Trp Ser Thr Thr Met Leu Cys Pro Val Ile Phe Phe -20

CCA TCC AAC TGT TGG AAA GAA TAT AAC AGG ACA CAG Pro Ser Asn Cys Trp Lys Glu Tyr Asn Arg Thr Gln

(2) INFORMATION FOR SEQ ID NO: 191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 177..230
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.8 seq FXLLFXXFXFFRQ/XG
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 191:

ACAAGTCTGT CCTCCCTAGG CTGGCAGCTC TGTCAGCACC CAGGTTGTTA GAATAGTTGT 60

TAAAACAGGT CATTCTGTTG CCAAGTAATT ACGGGGCCTT GSACTCAGTA ACCTTCCCCA 120

CGAAGCAGGC CGTAGTGTGC TTACTGCTCT CCCTTGSCTT TCCATCCCCT ACTTTG ATG Met

TKG GRR TTT TCT TTC YTT TTA CTT TTC YTT TAW TTT CYT TTT TTC CGC 227

Xaa Xaa Phe Ser Phe Xaa Leu Leu Phe Xaa Xaa Phe Xaa Phe Phe Arg -15 -10 -5

CAG KCT GGG
Gln Xaa Gly

(2) INFORMATION FOR SEQ ID NO: 192:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 451 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA

WO 99/06554 PCT/IB98/01238

(vi	ORIGINAL	SOURCE:
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- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 359..427
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.8

seq SVRLLFRFSVIMA/SE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 192:

ACACTGTGAA	ATGCAATTGT	GCCTTGAATA	AGAAGGTACC	TAGAAGCCAA	ATTAAAGTAA	60
TAATGACTTC	TTATTGGCTT	TGATTTTTCA	TTGCAGTATA	TGGGAATTGT	ACAGCAGGAA	120
ATGCTTATCA	TTAATTTCTG	ATGTTTTTA	AAGCACAACT	CGAAACATTT	CGATCATACA	180
TACATAGCAG	TAGAGATCTG	TGCCCTTCAG	GTACATTGWA	TCTGACCATC	AGTTTATATA	240
TGTCATTGAA	TTTTAAGAAT	ACTCATGTTA	. ATAATAGTCA	TCTATCCTTG	CATTTTGAAA	300
CTGTTCTAAT	CTTAGTGAAC	TTGAATTGGA	TTTCTGGGTA	AAAGAATGTG	TTTCTTTT	358
ATG TTG CT Met Leu Lei	T CTG TCC G Leu Ser G -20	lu Ala Leu	TCA GAA TCT Ser Glu Ser -15	GTC AGA CTC Val Arg Leu -10	Leu Phe	406
	r Val Ile M		GAG AAG CAA Glu Lys Gln			451

(2) INFORMATION FOR SEQ ID NO: 193:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 399 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 319..369
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8

seq SLPCTTAFPLLSS/KV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 193:

·	
ATTCTTCTCT GGTTACCTCT ATCTACCCCC GAGTCAACAA GCCCTGCCTG ATTACGCAGC	60
AGCAGTTTCT CCTGGAGAGT ATATGCCCTT CCCTACCAGA GTGGCTGTGC TCTGTGGACC	120
AACGGCATTT GTGCCGTGGC TGGTGTTTCC ACCATTCCAG TGGGTTGGCT GCAGAGTTAT	180
CCTTTGTGGG TGGGAGAGAG CACCAGGCCT CAGGAATCTC CCTGCTGGTC CCAGCCTCCA	240
TCTCCTCCTC CCCAACCCTG AACCTCTCCC GCAACCTGCA CCTCCCCCGA GAAGCCAGCC	300
ACAGAGGCAG AGAGCATC ATG GCT CTT ATC AGC CTG CCA TGC ACG ACA GCT Met Ala Leu Ile Ser Leu Pro Cys Thr Thr Ala -15 -10	351
TTC CCT TTA CTG TCC AGC AAG GTT TCC CAG CTT CTC TTG CCC CTC AGC Phe Pro Leu Leu Ser Ser Lys Val Ser Gln Leu Leu Pro Leu Ser -5 1 5 10	399
(2) INFORMATION FOR SEQ ID NO: 194:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 253 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA 	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Heart</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 83193 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.8</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 194:	
AGTGGAGAGT CGAGCCTGGG GTCGGCGGAG ACWGCTGGTG TCTGAAGCCG CTCGCGCCCA	60
GGGTGACCCT GTTTGCAGCA CG ATG TCT GAA GAA GAG GCG GCT CAG ATC CCC Met Ser Glu Glu Ala Ala Gln Ile Pro -35	112
AGA TCC AGT GTG TGG GAG CAG GAC CAG CAG AAC GTG GTG CAG CGT GTG Arg Ser Ser Val Trp Glu Gln Asp Gln Gln Asn Val Val Gln Arg Val -25 -20 -15	160
GTG GCT CTG CCC CTG GTC AGG GCC ACG TGC ACC GCG GTC TGC GAT GTT Val Ala Leu Pro Leu Val Arg Ala Thr Cys Thr Ala Val Cys Asp Val -10 -5 1 5	208
TAC AGT GCA GCC AAG GAC AGG CAC CCG CTG CTG GGC TCC GCC TGG	253

lyr Ser Ala Ala Lys Asp Arg His Pro Leu Leu Gly Ser Ala Trp

20

10

(i)	SEQUENCE	CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: $8..\overline{2}23$
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.8

seq LAELTVDPQGALA/IR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 195:

AAAAAAG	ATG GC Met Al	G GCG a Ala -70	GCG Ala	GCG Ala	GCA Ala	GCT Ala	GGT Gly -65	GCG Ala	GCC Ala	TCC Ser	GGG Gly	CTG Leu -60	CCG Pro	49
GGT CCA Gly Pro	GTG GC. Val Al -5	a Gln	GGA Gly	TTA Leu	AAG Lys	GAA Glu -50	GCG Ala	TTA Leu	GTG Val	GAT Asp	ACG Thr -45	CTC Leu	ACC Thr	97
GGG ATC Gly Ile	CTA TC Leu Se -40	C CCA r Pro	GTA Val	CAG Gln	GAG Glu -35	GTG Val	CGG Arg	GCG Ala	GCT Ala	GCT Ala -30	GAA Glu	GAA Glu	CAG Gln	145
ATT AAG Ile Lys -25	GTG CT	G GAG u Glu	GTG Val	ACG Thr -20	GAG Glu	GAA Glu	TTT Phe	GGT Gly	GTT Val -15	CAC His	TTG Leu	GCA Ala	GAA Glu	193
CTG ACT Leu Thr	GTA GA	CCC Pro	CAG Gln -5	GGG Gly	GCA Ala	CTG Leu	GCA Ala	ATC Ile 1	CGT Arg	CAG Gln	CTG Leu	GCA Ala 5	TCA Ser	241
GTC ATC Val Ile	TTG AA Leu Ly	s Gln	TAT Tyr	GTG Val	GAG Glu	ACT Thr 15	CAC His	TGG Trp	TGT Cys	GCC Ala	CAA Gln 20	TCA Ser	GAG Glu	289
AAA TTT Lys Phe														298

(i)	SEOUENCE	CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 114..464
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.8

seq XXXYLNFCPVCYC/FS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 196:

GTGA	LATTO	CGC C	CAGC	GGA	GC GC	CGCTC	GCGC	WC0	CGCGC	CGTT	CTCC	CGCTI	TTC (CCGG	CTCCGI	r 60
CGCT	'GACC	GCG 1	CGT?	AGAST	rt GO	SVWC	CGGC	S AAC	GCA	ACGG	CAGO	CGGG	ATC (ATG Met	116
		Gly			TTC Phe		Leu					Gly				164
	Ser				GTG Val -95											212
					TTT Phe											260
					AAC Asn											308
					GAT Asp											356
					ATT Ile											404
					CGC Arg -15											452
					AGC Ser											500

CTC

Leu

	·	
(2)	INFORMATION FOR SEQ ID NO: 197:	
	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 175 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR	
	(ii) MOLECULE TYPE: CDNA	
	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Dystrophic muscle</pre>	
	<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 4785 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.7</pre>	
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 197:	
ATT?	AACAAAG AGCAAGTTTA ACCTGAGTGG TCAACTTTTG CAGCAG ATG ATT GAR Met Ile Glu	55
ATG Met -10	CTA ATA TTT CTA GAC TGT GTC CTG TCT TCC AAA GAT ACA ATA ACC Leu Ile Phe Leu Asp Cys Val Leu Ser Ser Lys Asp Thr Ile Thr -5	103
ATG Met	TTT GTG AAG TTC ATA CCT ATT TTT CCT TTT CCT TTG CAG TTT TAT Phe Val Lys Phe Ile Pro Ile Phe Pro Phe Pro Leu Gln Phe Tyr 10 15 20	151
	CCC TCT TTC CTT TTG GAG Pro Ser Phe Leu Leu Glu 25 30	175
(2)	INFORMATION FOR SEQ ID NO: 198:	
	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 291 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR 	
	(ii) MOLECULE TYPE: CDNA	

(ix) FEATURE:

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

(C) IDENTIFICATION METHOD: Von Heijne matrix

(A) NAME/KEY: sig_peptide
(B) LOCATION: 49..285

(D) OTHER INFORMATION: score 3.7

WO 99/06554

seq VIGSLLVLTMLTC/RR	GSLLVLTMLTC/RR						
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 198:							
ACATCACAAA AATTAGGTGA CCATGGTTAT GATAATTCTT TGCCTAGT ATG CAT CCA Met His Pro	7						
TTT CTA GCT GCC CAC GGA CCT GCA TTT CAC AAA GGC TAC AAG CAT AGC Phe Leu Ala Ala His Gly Pro Ala Phe His Lys Gly Tyr Lys His Ser -75 -70 -65	;						
ACA ATT AAC ATT GTG GAT ATT TAT CCA ATG ATG TGC CAC ATC CTG GGA Thr Ile Asn Ile Val Asp Ile Tyr Pro Met Met Cys His Ile Leu Gly -60 -55 -50 -45	}						
TTA AAA CCA CAT CCC AAT AAT GGG ACC TTT GGT CAT ACT AAG TGC TTG Leu Lys Pro His Pro Asn Asn Gly Thr Phe Gly His Thr Lys Cys Leu -40 -35 -30	•						
TTA GTT GAC CAG TGG TGC ATT AAT CTC CCA GAA GCC ATC GCG ATT GTT Leu Val Asp Gln Trp Cys Ile Asn Leu Pro Glu Ala Ile Ala Ile Val -25 -20 -15)						
ATC GGT TCA CTC TTG GTG TTA ACC ATG CTA ACA TGC CGC CGG Ile Gly Ser Leu Leu Val Leu Thr Met Leu Thr Cys Arg Arg -10 -5 1	•						
(2) INFORMATION FOR SEQ ID NO: 199: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 122 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Kidney (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 3374 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.7 seq IWPMSASVATLWS/FT (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 199:							

ATCTTAGTGT GACACATGAA CCCCTCCCCT TC ATG ATC TGG CCT ATG TCT GCC

Met Ile Trp Pro Met Ser Ala

-10

TCT GTA GCT ACT CTC TGG TCC TTT ACC TCT TAC ATA AGC TAC CCA AGC Ser Val Ala Thr Leu Trp Ser Phe Thr Ser Tyr Ile Ser Tyr Pro Ser AGG TTT TAC TAT GAT GCT TGG 122 Arg Phe Tyr Tyr Asp Ala Trp 10 (2) INFORMATION FOR SEQ ID NO: 200: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 266 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 12..104 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.6 seq LFIYLVFVECLLC/TR (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 200: AAGGGTAATG G ATG GGA ATT GAT ATT TTC TAT CCT TCA CAC ATC CCA GAC Met Gly Ile Asp Ile Phe Tyr Pro Ser His Ile Pro Asp -30 TIT CAT CCT ATT CAT TTA TTC ATT TAT CTA GTG TTT GTA GAG TGC CTT Phe His Pro Ile His Leu Phe Ile Tyr Leu Val Phe Val Glu Cys Leu -15-10 CTG TGT ACC AGG AAC TGR GAW AGK TTG TCC KGA TTC AAC TGT GAT AAC 146 Leu Cys Thr Arg Asn Xaa Xaa Leu Ser Xaa Phe Asn Cys Asp Asn GCT CAA ATA ATC TTC ACA ACA GGC TCA TCC TCT AGT GGA GGA AAT AAA 194 Ala Gin Ile Ile Phe Thr Thr Gly Ser Ser Ser Gly Gly Asn Lys 20 CCA TTT AAA AGT AGT TTA TGT ACA GTA CAT AGA GGC CAA GAA AGG GAA Pro Phe Lys Ser Ser Leu Cys Thr Val His Arg Gly Gln Glu Arg Glu 40 AGA ATA GAG TGC CAA GGG AAT GGG 266 Arg Ile Glu Cys Gln Gly Asn Gly

50

(2) INFORMATION FOR SEQ ID NO: 201:

1	' i '	SECUENCE	CHARACTERISTICS:
1		, secuence	CDARACIERISTICS

- (A) LENGTH: 371 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 24..284
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6

seq LILQASLKGELEA/SQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 201:

AAATAGCTGA	TTATGAACGT	TTG	ATG	AAA	GAA	CTA	AAT	CAA	AAG	TTA	ACT	AAT	53
			Met	Lys	Glu	Leu	Asn	Gln	Lys	Leu	Thr	Asn	
					-85				_	-80			

AAA AAC AAC AAG ATA GAA GAT TTG GAG CAA GAA ATA AAA ATT CAA AAA 101
Lys Asn Asn Lys Ile Glu Asp Leu Glu Glu Ile Lys Ile Gln Lys
-75 -70 -65

CAG AAA CAA GAA ACC CTA CAA GAA GAA ATA ACT TCA TTA CAG TCT TCA

Gln Lys Gln Glu Thr Leu Gln Glu Glu Ile Thr Ser Leu Gln Ser Ser

-60

-50

GTA CAA GAA TAT GAA GAA AAA AAC WCC AAA ATC AAG CAA TTG CTT GTG

Val Gln Glu Tyr Glu Glu Lys Asn Xaa Lys Ile Lys Gln Leu Leu Val

-45

-35

-30

AAA ACC AAA AAG GAA CTG GCA GAT TCA AAG CAA GCA GAA ACT GAT CAC
Lys Thr Lys Lys Glu Leu Ala Asp Ser Lys Gln Ala Glu Thr Asp His
-25
-20
-15

TTA ATA CTT CAA GCA TCT TTA AAA GGT GAG CTG GAG GCA AGC CAG CAG
Leu Ile Leu Gln Ala Ser Leu Lys Gly Glu Leu Glu Ala Ser Gln Gln
-10 -5 1

CAA GTA GAA GTC TAT AAA GTA AGG GTT TTA CTT TTT AAG ATT AAA AAA 341
Gln Val Glu Val Tyr Lys Val Arg Val Leu Leu Phe Lys Ile Lys Lys
5 10 15

ATG TTT TTT CAT GTA GAA GTG AGG AAC GGG
Met Phe Phe His Val Glu Val Arg Asn Gly
20 25

(i) SEQUENCE CHARACTERISTICS:

PCT/IB98/01238

	(A) LENGTH: 383 base pairs (B) TYPE: NUCLEIC ACID (C) STRÄNDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA															
	(ii	i) M	OLE	CULE	TYPE	E: CI	DNA									
	<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney</pre>															
	<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 33371 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.6</pre>															
	(X1	L) S	EQUE	ENCE	DESC	CRIP:	rion:	: SEÇ) ID	NO:	202:	:				
ACAG	TCCTA	AC C	TTTC	GCTG <i>I</i>	AT GO	CTA	CTCTA	TA A					Leu			53
Met	CAG 6 Gln <i>P</i> -105	GAT Asp	GTT Val	CAG Gln	GGA Gly	GCC Ala -10	Leu	CAG Gln	T GT Cys	TAT Tyr	ACG Thr -95	CGT Arg	GCC Ala	ATC Ile	CAA Gln	101
ATT Ile -90	AAT C Asn E	CCT Pro	GCA Ala	TTT Phe	GCA Ala -85	GAT Asp	GCA Ala	CAT His	AGC Ser	AAT Asn -80	CTG Leu	GCT Ala	TCC Ser	ATT Ile	CAT His -75	149
AAG Lys	GAT I Asp S	rca Ser	GGG Gly	AAT Asn -70	ATT Ile	CCA Pro	GAA Glu	GCC Ala	ATA Ile -65	GCT Ala	TCT Ser	TAC Tyr	CGC Arg	ACG Thr -60	GCT Ala	197
CTG . Leu	AAA C Lys I	CTT Leu	AAG Lys -55	CCT Pro	GAT Asp	TTT Phe	CCT Pro	GAT Asp -50	GCT Ala	TAT Tyr	TGT Cys	AAC Asn	TTG Leu -45	GCT Ala	CAT His	245
TGC Cys	CTG C Leu G	CAG Gln -40	ATT Ile	GTC Val	TGT Cys	GAT Asp	TGG Trp -35	ACA Thr	GAC Asp	TAT Tyr	GAT Asp	GAG Glu -30	CGA Arg	ATG Met	AAG Lys	293
Lys	TTG C Leu V -25	GTC /al	AGT Ser	ATT Ile	GTG Val	GCT Ala -20	GAC Asp	CAG Gln	TTA Leu	GAG Glu	AAG Lys -15	AAT Asn	AGG Arg	TTG Leu	CTT Leu	341
CTG Leu -10	TGC F Cys I	ATC Ile	CTC Leu	ATC Ile	ATA Ile -5	GTA Val	TGC Cys	TAT Tyr	ATC Ile	CTC Leu 1	TTT Phe	CTC Leu	ATG Met			383

- (2) INFORMATION FOR SEQ ID NO: 203:
 - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 217 base pairs(B) TYPE: NUCLEIC ACID(C) STRANDEDNESS: DOUBLE(D) TOPOLOGY: LINEAR	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Dystrophic muscle</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 92208 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.6</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 203:	
ACATGTTGAG TACTTTTCC TCACCTGTTT TTCCATTCCT GTTAGCCGGA GCAAAAGGGC	60
CTCCAACTCC TCTTTTAGAG AGAAATGACT A ATG CTC ATA CTA GCA GAT ACC Met Leu Ile Leu Ala Asp Thr -35	112
AGA CGT GTC CAA GGA GGT ACC TTG GGC TTA ATT CCA GCA GTT CTC AAC Arg Arg Val Gln Gly Gly Thr Leu Gly Leu Ile Pro Ala Val Leu Asn -30 -25 -20	160
AGA GTC CAC GTG GCA TAT GCT ATA CCC AGC ATA CCT AGC CTC TTC TGC Arg Val His Val Ala Tyr Ala Ile Pro Ser Ile Pro Ser Leu Phe Cys -15	208
CAG CGC TGG Gln Arg Trp 1	217
(2) INFORMATION FOR SEQ ID NO: 204:	
 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 450 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR 	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 343402 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: 50070 3.6</pre>	

seq CVFLFPLISNTSS/YK

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 204:

CACACAATTA	ATATTAATGG	ATAACTAATT G	GAGTAATGA	TTATTAGCTA	CTGAATGCTG	60
ATAATAGAAG	TCATATTTAA	ATGCTTACTT A	GTTACTTAA	GTTAGTCAAG	GACTCTGAAA	120
AAAATAAGGT	TTAAAGTTAA	CAGTGTCATC A	GTCATTCCC	AGTTATCTTC	TTATTTAAGA	180
ACAAGATGGT	AATGCAGTTG	ССТТТСТТТА Т	TTAAATAGA	AAAAATTAAA '	TCAGGATAAA	240
ATGACCCAAC	TACAGTGATG	TATTTGGACA C	ACTACTTCT	TATCTTTCAA	TATAGACTTT	300
TATTTCTGGA	TTACCATAGA	TGGAAATAGT A	TTACTGGAC	AT ATG TTG (Met Leu '	_	354
ATT TAC TT Ile Tyr Ph -15	C TGT GTT TT e Cys Val Pho	T CTT TTT CC e Leu Phe Pr -10	C TTA ATT o Leu Ile	TCG AAT ACT Ser Asn Thr -5	TCT AGC Ser Ser	402
TAC AAA AA Tyr Lys As 1	T TGT CAT AA n Cys His Ly: 5	A ACT TTG CA s Thr Leu Gl	A CAC ACT n His Thr 10	ATA CCT CCC Ile Pro Pro	CAC GGG His Gly 15	450

(2) INFORMATION FOR SEQ ID NO: 205:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 201 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: $1..\overline{1}26$
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5

seq LLLQGACPCLIFL/RP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 205:

ATG Met	TTT Phe	CTC Leu -40	GCT Ala	CCC Pro	TCT Ser	Leu	CTG Leu -35	ATC Ile	ACA Thr	AAG Lys	CTG Leu	CTG Leu -30	ACC Thr	GGG Gly	TCA Ser	48
GAA Glu	AGT Ser -25	CCT Pro	GAT Asp	GGA Gly	AAT Asn	CCA Pro -20	CCA Pro	GCG Ala	CTG Leu	GGC Gly	AGG Arg -15	CCC Pro	CTC Leu	CTC Leu	CTC Leu	96

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			ATT Ile					1	44
			AAA Lys					1	92
 TTA Leu								2	01

(2) INFORMATION FOR SEQ ID NO: 206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 235..288
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5

seq SKSCLFYLQKVSG/IP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 206:

AAAGGTGGCT T	CAGGACCAC CTCCTGAGA	G CTTCGTTGTA	TTTCATGTAT ATTTCCCCAA	60
ATATATCAGC A	TCTGACCCT TGGCTTCTG	G GAGAAAGACA	GAGGCGGAAC CCTGGCCGCC	120
CCAGAGAGAG G	CAGCTGTGG GGGCAGAGA	T GTAACAACCC	TTTGAACCTT GACCTTGGAC	180
GCCAGGCTGT C	CGGGAGCTT CTCCCACAA	T GGCTGTTTTG	GGGATGTGAC CTGG ATG Met	237
			CTC CAA AAA GTA TCT Leu Gln Lys Val Ser -5	285
	GGG CTT CTC ACC Gly Leu Leu Thr 5			306

(2) INFORMATION FOR SEQ ID NO: 207:

(i) SEQUENCE CHARACTERISTICS:

			(B) (C)	TYP	E: N ANDE	UCLE DNES	IC A S: D	OUBL								
	(ii)	MOLE	CULE	TYP	E: C	DNA									
	(vi) ORIGINAL SOURCE:(A) ORGANISM: Homo Sapiens(D) DEVELOPMENTAL STAGE: Fetal(F) TISSUE TYPE: kidney															
(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 54191 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.5 seq RWLCLQAYLASFS/LE																
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 207:																
ACG	rgtc	CTC A	AGGA'	TTTT	CC TO	CTTG	GGCT	G GA	CAGT	TTGC	TCC	CCTG	GAG (ATG Met	56
AGC Ser -45	CTG Leu	ACT Thr	GCT Ala	AGT Ser	GGG Gly -40	CCA Pro	AGA Arg	GCT Ala	GCC Ala	TGG Trp -35	GAG Glu	GAA Glu	AGG Arg	GTG Val	GGG Gly -30	104
GGT Gly	CTC Leu	CAC His	ACT Thr	TGG Trp -25	GGT Gly	GCC Ala	AAC Asn	ATT Ile	CCT Pro -20	ACC Thr	GCC Ala	CCT Pro	GAT Asp	TCC Ser -15	CAG Gln	152
CGG Arg	TGG Trp	CTC Leu	TGT Cys -10	C T T Leu	CAG Gln	GCG Ala	TAC Tyr	CTG Leu -5	GCA Ala	TCC Ser	TTC Phe	AGT Ser	CTT Leu 1	GAG Glu	AGC Ser	200
CCC Pro	CAC His 5	AGA Arg	ATC Ile	TAC Tyr	CTK Leu	GAA Glu 10	TCT Ser	CCT Pro	CCC Pro	ACG Thr	CTC Leu 15	CTT Leu	TTC Phe	CCC Pro	CCG Pro	248
CCG Pro 20																251
(2)	INFO	RMAT	NOI	FOR	SEQ	ID N	10: 2	208:								
	(i	.) SE	QUEN (A)	NCE C	HARA	CTER	ISTI base	CS:	.rs							

- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

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<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 117182 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.5 seq AQLASPLLPGATP/VA</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 208:	
ACCGCAGAAA ATGCTAGGTG CAAAGTTTGT CGAAAGAAAG GTGAGGATGA CAAATTGATC	60
TTGTGTGATG AGTGTAATAA AGCCTTYCCA CCTGTTTTGT CTGAGGCCGG CCCTCT ATG Met	119
AAG TAC CAG ATG GTG AGT GGC AGT GCC CAG CTT GCC AGC CCG CTA CTG Lys Tyr Gln Met Val Ser Gly Ser Ala Gln Leu Ala Ser Pro Leu Leu -20 -15 -10	167
CCA GGC GCA ACT CCC GTG GCA GGA ACT ATA CTG AAG AGT CTG CTT CTG Pro Gly Ala Thr Pro Val Ala Gly Thr Ile Leu Lys Ser Leu Leu Leu -5 1 5 10	215
AGG ACA GTG AAG ATG AGA GTG ATG Arg Thr Val Lys Met Met Arg Val Met 15 20	242
(2) INFORMATION FOR SEQ ID NO: 209: (i) SEQUENCE CHARACTERISTICS:	
(A) LENGTH: 342 base pairs(B) TYPE: NUCLEIC ACID(C) STRANDEDNESS: DOUBLE(D) TOPOLOGY: LINEAR	
(ii) MOLECULE TYPE: CDNA	
(vi) ORIGINAL SOURCE:(A) ORGANISM: Homo Sapiens(D) DEVELOPMENTAL STAGE: Fetal(F) TISSUE TYPE: kidney	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 229333 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.5 seq CFWGLMYXWLLLG/SX</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 209:	
ACATCTGATC GATAATTATG TCACCTGTAC CTGTCGCCAG CTTGTCTTGT	60
GTTTTACTGC TAGAAATATC TAGTAGATGG CTGGAAATCT GCAGGCAAAG TGCAGAGGGA	120

GTGAGCCTGC GAGGAGAGGG SCTGGGCAAA GTGAMBGCCC TGGGCCGCAG AGTTCTTATC 180

TAAAAAATGG GAACAGTAGT GTCTTCCTAA AGGCACCATG GACTTAAA ATG AAT GGC Met Asn Gly -35													
ACG TTT CCT GGG ACT TAT GTA TAT TTG GTT GCT TAT GGG GAC TTA CGT Thr Phe Pro Gly Thr Tyr Val Tyr Leu Val Ala Tyr Gly Asp Leu Arg -30 -25 -20	285												
ATA TTT GGT TGC TTT TGG GGA CTT ATG TAT ATK TGG TTG CTT TTG GGG Ile Phe Gly Cys Phe Trp Gly Leu Met Tyr Xaa Trp Leu Leu Gly -15 -5	333												
TCT NAA GGG Ser Xaa Gly 1	342												

(2) INFORMATION FOR SEQ ID NO: 210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Muscle

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 131..222
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 66..157 id AA134726

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 216..282
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 152..218 id AA134726

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 283..342
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 220..279

id AA134726

est

(ix) FEATURE:

(A) NAME/KEY: other

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(B) LOCATION: 64..103 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 1..40 id AA134726 est (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 98..130 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 93 region 34..66 id AA134726 est (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 81..285 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 97 region 1..205 id R17226 est (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 50..112 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 12.7 seq ILFLLSWSGPLQG/QQ (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 210: GAGGCTGACT GTACGTTCCT TCTACTCTGG CACCACTCTC CAGGCTGCC ATG GGG CCC Met Gly Pro -20 AGC ACC CCT CTC CTC ATC TTG TTC CTT TTG TCA TGG TCG GGA CCC CTC 106 Ser Thr Pro Leu Leu Ile Leu Phe Leu Leu Ser Trp Ser Gly Pro Leu -15 -10 CAA GGA CAG CAC CAC CTT GTG GAG TAC ATG GAA CGC CGA CTA GCT 154 Gln Gly Gln Gln His His Leu Val Glu Tyr Met Glu Arg Arg Leu Ala GCT TTA GAG GAA CGG CTG GCC CAG TGC CAG GAC CAG AGT AGT CGG CAT Ala Leu Glu Glu Arg Leu Ala Gln Cys Gln Asp Gln Ser Ser Arg His 15 20 GCT GCT GAG CTG CGG AAC TTC AAG AAC AAG ATG CTG CCA CTG CTG GAG 250 Ala Ala Glu Leu Arg Asn Phe Lys Asn Lys Met Leu Pro Leu Leu Glu 35 40 GTG GCA GAG AAG GAG CGG GAG GCA CTC AGA ACT GAG GCC GRC ACC ATC 293 Val Ala Glu Lys Glu Arg Glu Ala Leu Arg Thr Glu Ala Xaa Thr Ile 55 TCN NVN GGA GTG GAT CGT CTG GAG CGG GAG GTA GAC TAT CTG 340

Ser Xaa Gly Val Asp Arg Leu Glu Arg Glu Val Asp Tyr Leu

65

70

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(2) INFORM	ATION FOR SEQ ID NO: 211:	
(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 321 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR	
(ii)	MOLECULE TYPE: CDNA	
(vi)	ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: 124310 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 46232 id T39765 est	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: 78123 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 95 region 146 id T39765 est	
(ix)	FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 76141 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 10.5 seq LMLLVSSLSPVQG/VL	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 211:	
AAAATAGGAG	TCTCTGGTAC TGCAAACCCA CAGCCTGGAC TCAGAGCTCA AGTCTGAACT	50
CTACCTCCAG	ACAGA ATG AAG TTC ATC TCG ACA TCT CTG CTT CTC ATG CTG Met Lys Phe Ile Ser Thr Ser Leu Leu Met Leu -20 -15	1

L	-10	Val	Ser	Ser	Leu	Ser -5	Pro	Val	CAA Gln	GGT	GTT Val 1	CTG Leu	GAG Glu	GTC Val	TAT Tyr 5	TAC Tyr	159
A	NCA Thr	AGC Ser	TTG Leu	AGG Arg 10	TGT Cys	AGA Arg	TGT Cys	GTC Val	CAA Gln 15	GAG Glu	AGC Ser	TCA Ser	GTC Val	TTT Phe 20	ATC Ile	CCT Pro	207

WU 99/00554		163	PC1/1B98/0
		ATC TTG CCC CGT GGG Ile Leu Pro Arg Gly 35	
CCA AGA AAA GA Pro Arg Lys Gl 40	A ATC ATA GTC TGG A 1 Ile Ile Val Trp I 45	AAG AAG AAC AAG TCA Lys Lys Asn Lys Ser 50	ATT GTG TGT 303 Ile Val Cys
GTG GAC CTC AA Val Asp Leu Ly 55			321
(i) SEQU (A (B (C (D (ii) MOL (vi) ORI (A (D (F (ix) FEA (A (B (C	N FOR SEQ ID NO: 21 CNCE CHARACTERISTIC LENGTH: 426 base TYPE: NUCLEIC ACI STRANDEDNESS: DOU TOPOLOGY: LINEAR CCULE TYPE: CDNA GINAL SOURCE: ORGANISM: Homo Sa DEVELOPMENTAL STA TISSUE TYPE: kidn CURE: NAME/KEY: other LOCATION: 24142 IDENTIFICATION ME OTHER INFORMATION	CS: pairs D BLE Spiens GE: Fetal Bey CTHOD: blastn	
(B (C (D	NAME/KEY: sig_pep LOCATION: 16156	STHOD: Von Heijne ma I: score 8 seq VLELLAAVCLVR	
AGTTTACGTG CCA		TAT GGT TTC AAC ATG Tyr Gly Phe Asn Met -40	
CAT CCA CAC GC His Pro His Al -35	GTC AAT GAG ATT G Val Asn Glu Ile A -30	GCA CTA AGC CTG AAC Ala Leu Ser Leu Asn -25	AAC AAG AAT 99 Asn Lys Asn -20
		GAA CTG TTG GCA GCC Glu Leu Leu Ala Ala -10	
GTC AGA GGC GG	G CAT GAA ATC ATT 1	TTA TCA GCA TTT GAT	AAC TTT AAA 195

Val Arg Gly Gly His Glu Ile Ile Leu Ser Ala Phe Asp Asn Phe Lys GAG GTT TGT GGA GAA AAA CAG CGC TTT GAG AAG TTG ATG GAA CAT TTC 243 Glu Val Cys Gly Glu Lys Gln Arg Phe Glu Lys Leu Met Glu His Phe AGG AAT GAA GAC AAT AAC ATA GAT TTT ATG GTG GCT TCT ATG CAG TTT Arg Asn Glu Asp Asn Asn Ile Asp Phe Met Val Ala Ser Met Gln Phe 30 35 ATT AAT ATT GTA GTC CAT TCA GTA GAA GAT ATG AAT TTC AGA GTT CAC 339 Ile Asn Ile Val Val His Ser Val Glu Asp Met Asn Phe Arg Val His 50 CTG CAG TAT GAA TTT ACC AAA TTA GGC CTG GMC GAA TAC TTG GRC AAG 387 Leu Gln Tyr Glu Phe Thr Lys Leu Gly Leu Xaa Glu Tyr Leu Xaa Lys CTG AAA CAC ACT GAG AGT GAC AAG CTT CAA GTC CAG ATC 426 Leu Lys His Thr Glu Ser Asp Lys Leu Gln Val Gln Ile 80 85

(2) INFORMATION FOR SEQ ID NO: 213:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 387 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 246..387
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 1..142 id HUM75821

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 246..387
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 1..142 id T08488 est
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 261..387

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 100 region 1..127 id R54273 est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 205..288
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 7.7

seq LVMCFLSYFGTFA/VE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 213:

ATTGGTAATT TTCAGCTCAC AAATGATGAA GAAATCCATA ACGTCGGAAC TTCCTTGACC	60
ITTGGATTTG GCACATTGAC CTGCTGGATC CAGGCTGCGC TGACACTCAA GGTCAACATC	120
AASAATGAAG GACGGAGAGT TGGAATTCCA CGGGTTATTC TGTCGGCATC TATCACTCTC	180
IGTGTGGTCC TCTACTTCAT CCTC ATG GCC CAA AGC ATC CAC ATG TAT GCA Met Ala Gln Ser Ile His Met Tyr Ala -25 -20	231
GCC AGG GTC CAG TGG GGC CTG GTC ATG TGC TTC CTG TCT TAT TTT GGC Ala Arg Val Gln Trp Gly Leu Val Met Cys Phe Leu Ser Tyr Phe Gly -15 -10 -5	279
ACC TTT GCC GTG GAG TTC CGG CAT TAC CGC TAT GAG ATT GTT TGC TCT Thr Phe Ala Val Glu Phe Arg His Tyr Arg Tyr Glu Ile Val Cys Ser 1 5 10	327
GAG TAC CAG GAG AAT TTC CTA AGC TTC TCA GAA AGC CTG TCA GAA GCT Glu Tyr Gln Glu Asn Phe Leu Ser Phe Ser Glu Ser Leu Ser Glu Ala 15 20 25	375
FCT GAA TAT CAG Ser Glu Tyr Gln 30	387

(2) INFORMATION FOR SEQ ID NO: 214:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 339 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal .
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other

WO 99/06554 166 (B) LOCATION: 124..335 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 95 region 1..212 id AA081335 est (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 212..309 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 95 region 1..98 id H88204 (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 296..335 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 82..121 id H88204 est (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 284..335 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 1..52 id W31695 est (ix) FEATURE: (A) NAME/KEY: sig peptide (B) LOCATION: 76..138 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 7.1 seg LHLFHLLIRPXQG/WX (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 214: ACTCTCTGCT GAACTCCCAA AGGGAGTGTG TGTATTTCCT CCCGTTCTTN ATCAGAGCCC 60 CCAAAATAAG TAGGA ATG GGC AGT GGC TAT TCA CAT TCA CTA CAC CTT TTC 111 Met Gly Ser Gly Tyr Ser His Ser Leu His Leu Phe -20 -15 CAT TTG CTA ATA AGG CCC TGS CAA GGT TGG RAG GRA ATT GTC CCT GCC His Leu Leu Ile Arg Pro Xaa Gln Gly Trp Xaa Xaa Ile Val Pro Ala

TGC TTC TGG AGA AAG AAG ATA TTG ACA CCA TCT ACG GGC ACC ATG GAA

Cys Phe Trp Arg Lys Lys Ile Leu Thr Pro Ser Thr Gly Thr Met Glu

CTG CTT CAA GTG ACC ATT CTT TTT CTT CTG CCC AGT ATT TGC AGC AGT Leu Leu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys Ser Ser

30

20

35

10

207

PCT/IB98/01238 WO 99/06554 167

		ACA Thr											_	ACT	303
40	501		0_1		45	-	 		50	301	Deu	Vai	Vai	55	
		AAA Lys													339
-11-	****			60			 110	65	****						

(2) INFORMATION FOR SEQ ID NO: 215:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 363 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 209..324
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 1..116 id AA081350

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 277..324
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97 region 3..50 id AA046671

est

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 157..204
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.7

seq CFSLVLLLTSIWT/TR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 215:

AGGGAAATCC GGATGTCTCG GTTATGAAGT GGAGCAGTGA GTGTGAGCCT CAACATAGTT 60 CCAGAACTCT CCATCCGGAC TAGTTATTGA GCATCTGCCT CTCATATCAC CAGTGGCCAT 120 CTGAGGTGTT TCCCTGGCTC TGAAGGGGTA GGCACG ATG GCC AGG TGC TTC AGC 174 Met Ala Arg Cys Phe Ser

										_						
CTG Leu -10	GTG Val	TTG Leu	CTT Leu	CTC Leu	ACT Thr -5	TCC Ser	ATC	TGG Trp	ACC Thr	ACG Thr 1	AGG Arg	CTC Leu	CTG Leu	GTC Val 5	CAA Gln	222
GGC Gly	TCT Ser	TTG Leu	CGT Arg 10	GCA Ala	GAA Glu	GAG Glu	CTT Leu	TCC Ser 15	ATC Ile	CAG Gln	GTG Val	TCA Ser	TGC Cys 20	AGA Arg	ATT Ile	270
ATG Met	GNN Xaa	RTC Xaa 25	ACC Thr	CTT Leu	GTG Val	AGC Ser	AAA Lys 30	AAG Lys	GCG Ala	AAC Asn	CAG Gln	CAG Gln 35	CTG Leu	AAT Asn	TTC Phe	318
ACA Thr	GAA Glu 40	NNV Xaa	NAA Xaa	GGA Gly	GGC Gly	CWW Xaa 45	WAR Xaa	GCT Ala	GCT Ala	GGG Gly	ACT Thr 50	AAG Lys	TTT Phe	GGC Gly		363

(2) INFORMATION FOR SEQ ID NO: 216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Heart

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 20..194
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 144..318

id AA045920

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 194..257
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 319..382

id AA045920

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 20..226
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 153..359

id N25870

est

(ix) FEATURE:

(A) NAME/KEY: other



(B)	LOCATION:	220.	.262
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(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 355..397 id N25870

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 20..176

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 94

region 143..299

id H99323

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 212..267

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 92

region 335..390

id H99323

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 67..262

(C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 95

region 1..196

id AA150024

est

(ix) FEATURE:

Pro Gln Gly Leu Tyr Ile

(A) NAME/KEY: sig_peptide (B) LOCATION: 171..269

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 6.7

seq MTCLSVLFGYATS/HP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 216:

AATCTTGTCA GAAGTCGTCG AAAATATTTA CACCAGCAGC TCCAGTTCAT ACCAATAAAG 60 AAGATCCTGC TACCCAAACT AATTTGGGRW TTATCCAWGC ATTTGKCGCT GCCATATCAG 120 TTATTAWTGK ATCYGAATTG GGTGATAAGA CATTTTTTAT AGCAGCCATC ATG GCA 176 Met Ala ATG CGC TAT AAC CGC CTG ACC GTG CTG GCT GGT GCA ATG CTT GCC TTG 224 Met Arg Tyr Asn Arg Leu Thr Val Leu Ala Gly Ala Met Leu Ala Leu -30 -25 GGA CTA ATG ACA TGC TTG TCA GTT TTG TTT GGC TAT GCC ACC AGT CAT 272 Gly Leu Met Thr Cys Leu Ser Val Leu Phe Gly Tyr Ala Thr Ser His -15 -5 CCC CAG GGK CTA TAC ATA 290

((2)	INFORMATION	FOR	SEO	ΙD	NO:	217:
3	· /		- 011	~~~~			~ 1 .

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 369 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 319..370
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 92

region 31..82

id R51759

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 288..318
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 1..31

id R51759

est

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 211..288
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.3

seq RQLLLPLPPFSFP/AP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 217:

AGTCAATTCT AGGAGCCATC AAGCATGAAA GTGGTTCTGT CTCCTGAGCG CAASCTCGCC 60

GGACCCCTGG GCGAAGGCCT GGACTTGCAG ATGTGTGTTC CCTGTGCGGG TGGACAGAGG 120

GGGCCCTTAT GACCCACATT GCAGCCCCAT TCCACCACCC CTTCCTCCCC AGAGCAGTCT 180

CTGCCGAGGG ACAGCACCTG TGTCCCTTCG ATG CCA CAA CAG CCA GTT GAA CAG 234

Met Pro Gln Gln Pro Val Glu Gln
-25 -20

GGG AGC CCT TTG CTC AGG CAG CTT CTC CTG CCT CTC CCT CCT TTC TCC

Gly Ser Pro Leu Leu Arg Gln Leu Leu Pro Leu Pro Pro Phe Ser

-15

-10

-5

WO 99/06554	PCT/IB98/01238
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TTC CCT GCC CCA TCC CCG TGC CCT TCT TGG CCT GTG GCG CTG GGG AGC Phe Pro Ala Pro Ser Pro Cys Pro Ser Trp Pro Val Ala Leu Gly Ser 10

CAT GGT GTG GCA TAC TGG GGC TCC TGC TCC TTG GGS CAC His Gly Val Ala Tyr Trp Gly Ser Cys Ser Leu Gly His 25

(2) INFORMATION FOR SEQ ID NO: 218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 117..390
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 1..274

id C16636

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 121..360
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.2

seq RASLLPMLLGSWA/FL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 218:

AAA	AAAG?	AGC 1	rgg t :	rccc	rg go	CAGG	CTGG	A GGC	GCAG	GAGC	TGG	GCC	ACG (CTGG:	CTGGG	60
ATA	GTTGC	GC 1	AGGG	AGGC	rg To	CTAC	CTGG	CT	CCA	SAAT	GGA	CGGC	CCT (GTGG	CAGAGC	120
ATG Met -80	CCA Pro	AGC Ser	AGG Arg	AGC Ser	CCT Pro -75	TTC Phe	ACG Thr	TGG Trp	TCA Ser	CAC His -70	CTC Leu	T GT Cys	TGG Trp	AGA Arg	GCT Ala -65	168
GGG Gly	CGC Arg	TGT Cys	CCC Pro	AGG Arg -60	TGG Trp	CGG Arg	GCA Ala	TGC Cys	CTG Leu -55	TCT Ser	TCC Ser	TCA Ser	AGT Ser	GTG Val -50	AGA Arg	216
ATG Met	TGC Cys	AGC Ser	CCA Pro -45	GCG Ala	GCT Ala	CCT Pro	TCA Ser	AGA Arg -40	TTC Phe	GGG Gly	GCA Ala	TTG Leu	GGC G1y -35	ATN Xaa	TCT Ser	264
GCC	AGG	AGA	TGG	CCA	AGA	AGG	GAT	GCA	GAC	ACC	TGG	TGT	GCT	CCT	CAG	312

Ala Arg Arg Trp Pro Arg Arg Asp Ala Asp Thr Trp Cys Ala Pro Gln
-30 -25 -20

GGG GTA ATG CGG GCA TCG CTG CTG CCT ATG CTG CTA GGA AGC TGG GCA
Gly Val Met Arg Ala Ser Leu Leu Pro Met Leu Leu Gly Ser Trp Ala
-15 -10 -5

TTC CTG CCA CCA TCG TGC TCC CCG AGA GCA
Phe Leu Pro Pro Ser Cys Ser Pro Arg Ala
1 5 10

390

(2) INFORMATION FOR SEQ ID NO: 219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Muscle

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 86..409
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97 region 50..373 id AA147010

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 132..450
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 91

region 156..474

id AA142584

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 222..450
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 1..229

id AA043641

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 101..304
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98 region 72..275 id T18932

PCT/IB98/01238

est

(ix)	FEATURE:
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(A) NAME/KEY: other(B) LOCATION: 132..243

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 90

region 146..257 id AA123074

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide
(B) LOCATION: 165..284

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 6

seq LTYGIILTHGASG/DM

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 219:

AACGCTGTGG CGGGGCAGGC GAGGCGGTCG CTTCGAGCGC GCTAGTCAGC TCCCTGAAGG GAGTGACGGC GGTTGGGTGC CCGCGGCCAC TTTTGCCTTC CCGGGGAGAT GTCCTTTGCT TCTCAGATGT AAAKGCACTT TAAGTTTGKW ATTCAACAGT GAAA ATG AGT CAT ACA Met Ser His Thr -40 GAG GTT AAA TTA AAA ATA CCT TTT GGA AAT AAA TTA CTA GAT GCT GTT 224 Glu Val Lys Leu Lys Ile Pro Phe Gly Asn Lys Leu Leu Asp Ala Val -35 TGT TTG GTA CCT AAC AAG AGC TTA ACA TAT GGA ATA ATT CTT ACA CAT 272 Cys Leu Val Pro Asn Lys Ser Leu Thr Tyr Gly Ile Ile Leu Thr His -15 GGA GCA TCA GGA GAT ATG AAT CTT CCT CAT TTG ATG TCA CTG GCA TCC Gly Ala Ser Gly Asp Met Asn Leu Pro His Leu Met Ser Leu Ala Ser CAT CTT GCA TCT CAT GGG TTT TTC TGC CTG AGA TTT ACC TGT AAA GGC 368 His Leu Ala Ser His Gly Phe Phe Cys Leu Arg Phe Thr Cys Lys Gly 15 20 CTT AAT ATT GTA CAT AGA ATT AAG GCG TAT AAA TCA GTT TTG AAT TAC 416 Leu Asn Ile Val His Arg Ile Lys Ala Tyr Lys Ser Val Leu Asn Tyr 30 CTG AAG ACA TCA GGM RAA TAC AAA CTT GCA GGT 449 Leu Lys Thr Ser Gly Xaa Tyr Lys Leu Ala Gly 45

(2) INFORMATION FOR SEQ ID NO: 220:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE



- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 75..254
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 1..180

id T31666

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 73..126
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 92

region 88..141

id R58665

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 23..77
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 90

region 39..93

id R58665

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 157..231
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 63..137

id R14990

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 95..144
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 94

region 1..50

id R14990

id T26956

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 135..254
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 99 region 1..120

est

	(i	(x.	FEAT	URE:
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- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 31..150
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6

seq LCXEFXSVASCDA/AV

(xi) SEQUENCE DESCRIPTION: SEO ID NO: 220:

AAAAAGGGGC GGTGCAGAGG CGGCAGGAAG ATG GAG TTG GGG AGT TGC CTG GAG

Met Glu Leu Gly Ser Cys Leu Glu

-40 -35

GGC GGG AGG GAG GCG GAG GAA GAG GGC GAG CCT GAG GTG AAA AAG 102

GGC GGG AGG GAG GCG GAG GAA GAG GGC GAG CCT GAG GTG AAA AAG 102
Gly Gly Arg Glu Ala Ala Glu Glu Glu Glu Pro Glu Val Lys Lys
-30 -25 -20

CGG CGA CTT CTG TGT STR GAG TTT RCC TCG GTC GCA AGC TGC GAT GCC

Arg Arg Leu Leu Cys Xaa Glu Phe Xaa Ser Val Ala Ser Cys Asp Ala

-15

-10

-5

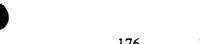
GCA GTG GCT CAG TGC TTC CTG GCC GAK AAC GAC TGG GAG ATG GAA AGG 198
Ala Val Ala Gln Cys Phe Leu Ala Xaa Asn Asp Trp Glu Met Glu Arg
1 5 10 15

GCT CTG AAC TCC TAC TTC GAG CCT CCG GTG GAG GAG AGC GCC TTG GAA
Ala Leu Asn Ser Tyr Phe Glu Pro Pro Val Glu Glu Ser Ala Leu Glu
20 25 30

CGC CGA CCA DGG
Arg Arg Pro Xaa
35

(2) INFORMATION FOR SEQ ID NO: 221:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 318 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 138..317
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98 region 52..231 id AA099777 est



	170	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: 85135 (C) FDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 94 region 151 id AA099777 est	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: 138222 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 95 region 83167 id HSB16C031 est	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: 80135 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 94 region 2782 id HSB16C031 est	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: 145314 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 91 region 43212 id AA068028 est	
(ix)	FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 148255 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 5.8 seq AFVSGLLIGQCSS/QK	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 221:	
	TTGAGACCGG AGGGAATCTG GCCCCTAGAG GCTGGTACTT GGGCCCGAAA	60
	CGGCGGAGAG ACCGTCCGAG GTAATTGTCT GCCACGAGTG CACATTCTGA	120
AAACAGGRGR	WTTTAAGKTT CCTAAAA ATG GGA AGA ACC TAC ATT GTA GAA GAG Met Gly Arg Thr Tyr Ile Val Gly	174

AAAC -35 Arg Thr Tyr Ile Val Glu Glu -30 ACT GTT GGC CAG TAT CTT TCA AAC ATA AAT CTC CAA GGA AAG GCT TTT 222 Thr Val Gly Gln Tyr Leu Ser Asn Ile Asn Leu Gln Gly Lys Ala Phe -25 GTC TCT GGC CTT TTA ATA GGA CAG TGT TCG TCA CAA AAG GAT TAT GTG 270 Val Ser Gly Leu Leu Ile Gly Gln Cys Ser Ser Gln Lys Asp Tyr Val

-10

-5

1

5

ATT CTT GCC ACT AGA ACG CCA CCC AAA GAG GAG CAA AGT GAG AAC TTG Ile Leu Ala Thr Arg Thr Pro Pro Lys Glu Glu Gln Ser Glu Asn Leu 15

- (2) INFORMATION FOR SEQ ID NO: 222:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 474 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: CDNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 227..433
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 1..207

id R16604

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 432..474
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 207..249

id R16604

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 227..440
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 1..214

id N99558

est

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 109..171
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.6

seq CLSCLLIPLALWS/II

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 222:

TAT	GAAG	TGA	AGGG	СТСТ	GA C	CCTG	GAAG	T GG	TTCT.	AAGC	AGG	GCAA	A AT Me	G GG t Gl -2	G TCT y Ser 0	117
CGG Arg	AAG Lys	TGT Cys	GGA Gly -15	GGC Gly	TGC Cys	CTA Leu	AGT Ser	TGT Cys -10	TTG Leu	CTG Leu	ATT Ile	CCG Pro	CTT Leu -5	GCA Ala	CTT Leu	165
TGG Trp	AGT Ser	ATA Ile 1	ATC Ile	GTG Val	AAC Asn	ATA Ile 5	TTA Leu	TTG Leu	TAT Tyr	TTC Phe	CCG Pro 10	AAT Asn	GGG Gly	CAA Gln	ACT Thr	213
TCC Ser 15	TAT Tyr	GCA Ala	TCC Ser	AGC Ser	AAT Asn 20	AAA Lys	CTC Leu	ACC Thr	AAC Asn	TAC Tyr 25	GTG Val	TGG Trp	TAT Tyr	TTT Phe	GAA Glu 30	261
GGA Gly	ATC Ile	TGT Cys	TTC Phe	TCA Ser 35	GGC Gly	ATC Ile	ATG Met	ATG Met	CTT Leu 40	ATA Ile	GTA Val	ACA Thr	ACA Thr	GTT Val 45	CTT Leu	309
CTG Leu	GTA Val	CTG Leu	GAG Glu 50	AAT Asn	AAT Asn	AAC Asn	AAC Asn	TAT Tyr 55	AAA Lys	TGT Cys	TGC Cys	CAG Gln	AGT Ser 60	GAA Glu	AAC Asn	357
TGC Cys	AGC Ser	AAA Lys 65	AAA Lys	TAT Tyr	GTG Val	ACA Thr	CTG Leu 70	CTG Leu	TCA Ser	ATT Ile	ATC Ile	TTT Phe 75	TCT Ser	TCC Ser	CTC Leu	405
GGA Gly	ATT Ile 80	GCT Ala	TTT Phe	TCT Ser	GGA Gly	TAC Tyr 85	TGC Cys	CTG Leu	GTC Val	ATC Ile	TCT Ser 90	GCC Ala	TTG Leu	GGT Gly	CTT Leu	453
GTC Val 95					TGC Cys 100											474

(2) INFORMATION FOR SEQ ID NO: 223:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 459 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 128..341
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98 region 1..214 id N99558

est

	\mathbf{x}	EΑ		

- (A) NAME/KEY: other(B) LOCATION: 399..459
- (C) IDENTIFICATION METHOD: blastn
 (D) OTHER INFORMATION: identity 95

region 278..338

id N99558

est

(ix) FEATURE:

- (A) NAME/KEY: other
 (B) LOCATION: 359..407
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 237..285

id N99558

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 128..334
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..207

id R16604

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 333..386
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 207..260

id R16604

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 10..72
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.6

seq CLSCLLIPLALWS/II

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 223:

AAGGGCAAA ATG GGG TCT CGG AAG TGT GGA GGC TGC CTA AGT TGT TTG CTG 51

Met Gly Ser Arg Lys Cys Gly Gly Cys Leu Ser Cys Leu Leu

-20 -15 -10

-15 -1

ATT CCG CTT GCA CTT TGG AGT ATA ATC GTG AAC ATA TTA TTG TAT TTC 99
Ile 2ro Leu Ala Leu Trp Ser Ile Ile Val Asn Ile Leu Leu Tyr Phe

-5 1 5

CCG AAT GGG CAA ACT TCC TAT GCA TCC AGC AAT AAA CTC ACC AAC TAC
Pro Asn Gly Gln Thr Ser Tyr Ala Ser Ser Asn Lys Leu Thr Asn Tyr
10 20 25

GTG TGG TAT TTT GAA GGA ATC TGT TTC TCA GGC ATC ATG ATG CTT ATA 195

180 Val Trp Tyr Phe Glu Gly Ile Cys Phe Ser Gly Ile Met Met Leu Ile GTA ACA ACA GTT CTT CTG GTA CTG GAG AAT AAT AAC AAC TAT AAA TGT Val Thr Thr Val Leu Clu Val Leu Glu Asn Asn Asn Tyr Lys Cys 243 50 TGC CAG AGT GAA AAC TGC AGC AAA AAA TAT GTG ACA CTG CTG TCA ATT 291 Cys Gln Ser Glu Asn Cys Ser Lys Lys Tyr Val Thr Leu Leu Ser Ile 60 ATC TTT TCT TCC CTC GGA ATT GCT TTT TCT GGA TAC TGC CTG GTC ATC 339 Ile Phe Ser Ser Leu Gly Ile Ala Phe Ser Gly Tyr Cys Leu Val Ile 75 80 TCT GCC TTG GGT CTT GTC CAA GGG CCA TAT TGC CGC ACC CTT GAT GGC Ser Ala Leu Gly Leu Val Gln Gly Pro Tyr Cys Arg Thr Leu Asp Gly 387 100 TGG GAG TAT GCT TTT GAA GGC ACT RCT GGA CGT TTC CTT ACA GAT TCT Trp Glu Tyr Ala Phe Glu Gly Thr Xaa Gly Arg Phe Leu Thr Asp Ser 435 110 115 AGC ATA TGG ATT CAG TGC CTG GAA 459 Ser Ile Trp Ile Gln Cys Leu Glu

(2) INFORMATION FOR SEQ ID NO: 224:

125

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 453 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 61..399
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 6..344

id H09880

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 408..454
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95 region 355..401

id H09880

10 110 9001

est



(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 60..399
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 56..395

id H29351

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 393..432
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 391..430

id H29351

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 65..369
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 41..345

id H94779

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 118..455
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 1..338

id N27248

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 122..399
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..278

id T74091

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 393..434
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 273..314

id T74091

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 346..408
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.5

seq SFLPSALVIWTSA/AF

PCT/IB98/01238

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 224:

ACTCCTTTTA	GCATAGGGGC	TTCGGCGCC	A GCGGCCAGCG	CTAGTCGGTC TGGTAA	GTGC 60
CTGATGCCGA	GTTCCGTCTC	TCGCGTCTTT	TCCTGGTCCC	AGGCAAAGCG GASGNA	GATC 120
CTCAAACGGC	CTAGTGCTTC	GCGCTTCCGG	AGAAAATCAG	CGGTCTAATT AATTCC	TCTG 180
GTTTGTTGAA	GCAGTTACCA	AGAATCTTCA	ACCCTTTCCC	ACAAAAGCTA ATTGAG	TACA 240
CGTTCCTGTT	GAGTACACGT	TCCTGTTGAT	TTACAAAAGG	TGCAGGTATG AGCAGG	TCTG 300
AAGACTAACA	TTTTGTGAAG	TTGTAAAACA	GAAAACCTGT	TAGAA ATG TGG TGG Met Trp Trp -20	
CAG CAA GGC Gln Gln Gly -15	Leu Ser Pr	C CTT CCT le Leu Pro -10	TCA GCC CTT Ser Ala Leu	GTA ATT TGG ACA TO Val Ile Trp Thr So	CT 405 er
GCT GCT TTC Ala Ala Phe 1	ATA TTT TO	A TAC ATT r Tyr Ile 5	ACT GCA GTA Thr Ala Val	ACA CTC CAC CAT A'Thr Leu His His I	TA 453 le 15

(2) INFORMATION FOR SEQ ID NO: 225:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 282 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 11..277
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 92

region 29..295 id AA041777

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 56..277
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 99 region 1..222

id HSClQB111

est

WO 99/06554

•	i	v	١	FE	AT	נזי	RF.	٠

(A) NAME/KEY: other

(B) LOCATION: 135..281

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 56..202

id H10738

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 81..133

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 1..53 id H10738

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 75..277

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 6..208 id HSC2KE111

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 89..263

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 2..176 id W24981

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 106..228

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5.4

seq PLIFSLWCSGVLL/HI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 225:

AAGAGTGCGC GGRSATTGGG GCTTTCCAGC TCTCACAGAA CCTTCAGCAT CCCCAGCTGC 60

CGGTCTTGGC ATCTTCGAAG TAAGGAGAGT TTTAGATGCT TCTGG ATG TTC AAT GCT 117

Met Phe Asn Ala

-40

-4(

AGC ACC TTT ACA GAC TGG AGC AGC TCG ATT TTC TTC GTA TTT ACT TTC

Ser Thr Phe Thr Asp Trp Ser Ser Ser Ile Phe Phe Val Phe Thr Phe

-35

-30

-25

AAG AGC AAG AAA AGT GCT GGG CTC CCA CTT ATT TTC TCC CTG TGG TGT 213 Lys Ser Lys Lys Ser Ala Gly Leu Pro Leu Ile Phe Ser Leu Trp Cys

-20 -15 -10

TCC GGA GTT CTG CTC CAT ATC CAC CAG AAA GCT GGC GGC CCA CGG CTT 261

Ser Gly Val Leu Leu His Ile His Gln Lys Ala Gly Gly Pro Arg Leu
-5 1 5 10

TGG CGC ATC CAT GGC GAG CAG Trp Arg Ile His Gly Glu Gln 15

282

(2) INFORMATION FOR SEQ ID NO: 226:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 332 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 155..334
 - (C) IDENTIFICATION METHOD: fasta
 - (D) OTHER INFORMATION: identity 98.3

region 1..181 id HSU90144

vrt

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 218..328
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 90..200

id T70246

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 128..216
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 1..89

id T70246

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 170..328
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 96

region 50..208

id T70127

est

(ix) FEATURE:

WO 99/06554

(A)	NAME/KEY:	other
(B)	LOCATION:	219328

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 62..171 id AAl14263

est

(ix) FEATURE	::
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(A) NAME/KEY: other(B) LOCATION: 159..218

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 1..60 id AA114263

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide
(B) LOCATION: 222..308

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 13.4

seq SLLLVQLLTPCSA/QF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 226:

GACTCTTACT GTTTCTCATG GTGAGAAGAC AATATTTGCT TTCTCTTTTT CCTTTCTTCC 60

GGATGAGAGG NTAAGCCATA ATAGAAAGAA TGGAGAATTA TTGATTGACC GTCTTTATTC 120

TGTGGGCTCT GATTCTCCAA TGGGAATACC AAGGGATGGT TTTCCATACT GGAACCCWWA 180

GGTAAAGACA CTCAAGGACA GACATTTTTG GCAGAGCATA G ATG AAA ATG GCA AGT 236

Met Lys Met Ala Ser -25

TCC CTG GCT TTC CTT CTG CTC AAC TTT CAT GTC TCC CTC TTG GTC 284

Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val Ser Leu Leu Leu Val -20 -15 -10

CAG CTG CTC ACT CCT TGC TCA GCT CAG TTT TCT GTG CTT GGA CCT CTG 332

Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser Val Leu Gly Pro Leu

(2) INFORMATION FOR SEQ ID NO: 227:

-5

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 414 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

186	PCT/IB98/01

1	1 0	١	FEATURE:	
1	TX	1	FEATURE:	

(A) NAME/KEY: other

(B) LOCATION: 182..411

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 99

region 1..230 id C15003

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 182..411

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 99

region 1..230 id HUM407E11B

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 182..369

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 1..188 id C15677

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 212..369

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 99

region 26..183 id HUM169E08B

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 274..399

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5.2

seq LLFDLVCHEFCQS/DD

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 227:

ACCAGGAACA TCCAGCTATT TATGATAGCA TTTGCTTCAT TATGTCAAGT TCAACAAATG 60 TTGACTTGCT GGTGAAGGTG GGGGAGGTTG TGGACAAGCT CTTTGATTTG GATGAGAAAC 120 TAATGTTAAG AATGGGTCAG AAATGGGGCT GCTCAGCCTC TGGACCAACC CCAGGAAGAG 180 TCTGAAGAGC AGCCAGTGTT TCGGCTTGTG CCCTGTATAC TTGAAGCTGC CAAACAAGTA 240 CGTTCTGAAA ATCCAGAATG GCTTGATGTT TAC ATG CAC ATT TTA CAA CTG CTT 294 Met His Ile Leu Gln Leu Leu -40 ACT ACA GTG GAT GAT GGA ATT CAA GCA ATT GTA CAT TGT CCT GAC ACT 342 Thr Thr Val Asp Asp Gly Ile Gln Ala Ile Val His Cys Pro Asp Thr

WO 99/06554 PCT/IB98/01238

GGA AAA GAC ATT TGG AAT TTA CTT TTT GAC CTG GTC TGC CAT GAA TTC 390 Gly Lys Asp Ile Trp Asn Leu Leu Phe Asp Leu Val Cys His Glu Phe -15

TGC CAG TCT GAT GAT CCA GCC CGG 414

Cys Gln Ser Asp Asp Pro Ala Arg 1 5

(2) INFORMATION FOR SEQ ID NO: 228:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 419 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 66..96
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 96 region 1..31

region 1..3. id AA017364

est

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 114..242
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2

seq PMQLLQVLSDVLA/EI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 228:

AAAC	CGTI	GC C	AAGG	AGCI	C GA	CTCT	GGGP	GCG	GTCT	AGA	GCCC	CGGGC	GC C	TCCT	'GGGGG	60
GTGG	GGAA	AAC C	GTTT	CGT	SA GO	SAGAA	ATTTC	G AGT	TAAF	ATT	ATAF	AGACC	TA P		ATG let	116
		CAA Gln -40				Ile		Asp								164
		AAC Asn														212
		CAA Gln														260

-10 -5 1 5

CTT GTG GAT ATC AGA GAG GAG ATG CCA GAG CAG ACA GCC AAA CGA ATG
Leu Val Asp Ile Arg Glu Glu Met Pro Glu Gln Thr Ala Lys Arg Met
10 • 15 20

TTG AGC CTT CTT GGT ATT CTT AAG TAC AAA CCT TCA GGA AAT GCC ACA
Leu Ser Leu Leu Gly Ile Leu Lys Tyr Lys Pro Ser Gly Asn Ala Thr
25 30

GAT ATG AGT ACT TTT CGT CAG GGT TTG GTG ATT GGA AGT AAA CCT GTA
Asp Met Ser Thr Phe Arg Gln Gly Leu Val Ile Gly Ser Lys Pro Val
40 45 50

ATT TAC CCA GTG CTC

Ile Tyr Pro Val Leu

55

(2) INFORMATION FOR SEQ ID NO: 229:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 371 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 53..203
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 96 region 1..151 id T34361

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 205..358
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 93

region 152..305

id T34361

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 205..342
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 94 region 131..263

id HSC16A051

est



(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 74..203
- (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 94

region 1..130 id HSC16A051

est

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 340..373
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 94 region 267..300

id HSC16A051

est

(ix) FEATURE:

- (A) NAME/KEY: other
 (B) LOCATION: 61..256
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 41..236

id T35252

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 255..302
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 236..283

id T35252

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 60..146
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 57..143

id H92421

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 205..278
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 200..273

id H92421

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 61..203
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 85..227

id T19059 est

(ix)	FEATURE	:

(A) NAME/KEY: other(B) LOCATION: 205..270

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 93

region 228..293

id T19059

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 93..329

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4.6

seq IIHAXGLVRECLA/XT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 229:

AAGA	CCTG	igg c	GTCT	'GGAA	T GA	ATCTA	CGTG	CTI	'AAAT	'ACA	CCAC	TCGC	CA C	CATT	TTCTC	60
CAGC	TGGG	AG T	GTCC	ACTC	G CC	CTTCC	CACCA	. GC					TCA Ser -75			113
CGC Arg																161
													GAG Glu			209
													TAC Tyr			257
													CAC His			305
								_					CCA Pro			353
					TTT Phe											371

(2) INFORMATION FOR SEQ ID NO: 230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

99/06554	191	PCT/IB98
(ii) MOLECULE TYPE: CDNA		

١	(11)	MOL	COT!	E 111	 CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 107..234
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..128

id N88564

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 59..103
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.5

seq LLGAAAVAALGRG/RA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 230:

AACC	CGGCF	AGC I	GAAC	CCCAC	cc cc	GCGC	CAC	G GG	ACTTI	rGAC	GCGT	GCTC	CTG C	GCT	rgcc	58
	AGA Arg															106
	CCC Pro															154
	CGA Arg															202
	GGA Gly 35															235

(2) INFORMATION FOR SEQ ID NO: 231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney



(ix)	FEAT	URE:
	(A)	NAM

(A) NAME/KEY: other

(B) LOCATION: 13..162

(C) PDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 20..169

id N41898

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 26..162

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 38..174

id H69272

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 45..162

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 1..118

id N20619

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 13..60

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4.5

seq RLLLRRFLASVIS/RK

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 231:

AATTGCAGGG AG ATG GCT CAG CGA CTT CTT CTG AGG AGG TTC CTG GCC TCT 51

Met Ala Gln Arg Leu Leu Arg Arg Phe Leu Ala Ser

-15 -10 -5

GTC ATC TCC AGG AAG CCC TCT CAG GGT CAG TGG CCA CCC CTC ACT TCC

Val Ile Ser Arg Lys Pro Ser Gln Gly Gln Trp Pro Pro Leu Thr Ser

AGA GCC CTG CAG ACC CCA CAA TGC AGT CCT GGT GGC CTG ACT GTA ACA
Arg Ala Leu Gln Thr Pro Gln Cys Ser Pro Gly Gly Leu Thr Val Thr
15 20 25

CCC AAC CCA GCG CCG GGG
Pro Asn Pro Ala Pro Gly
30 35

(2) INFORMATION FOR SEQ ID NO: 232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: NUCLEIC ACID

WO 99/06554	PCT/IB98/01
(C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 59214 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 98</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 122169 (C) IDENTIFICATION METHOD: Von Heijne no (D) OTHER INFORMATION: score 4.4</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 232:	
AAGGAGAGTC ACGTGAGAGT GGGCGGAGGG GGTGGAGGTT TGTCTC	CGCT GTTTCATCTC 60
TATGGCTGTC AGAGGTGGGC GGCTTTGACC GAGAGGCTGC TGGAGC	TCGT GTTTGGACGC 120
G ATG TTT CGT CTG AAC TCA CTT TCT GCT TTG GCA GAA Met Phe Arg Leu Asn Ser Leu Ser Ala Leu Ala Glu -15 -5	Leu Ala Val Gly
TCT CGA TGG TAC CAT GGA GGA TCA CAG CCC ATC CAG AT Ser Arg Trp Tyr His Gly Gly Ser Gln Pro Ile Gln II	
(2) INFORMATION FOR SEQ ID NO: 233:	
(i) SEQUENCE CHARACTERISTICS:	

- (2) INFORM
 - (i)
 - (A) LENGTH: 358 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: CDNA
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 44..169
 - (C) IDENTIFICATION METHOD: blastn



(D) OTHER INFORMATION: identity 100

region 1..126 id AA094226

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 170..231
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 126..187 id AA094226

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 230..261
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 185..216 id AA094226

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 44..195
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 129..280

id R13710

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 193..254
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 279..340

id R13710

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 44..282
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 172..410

id R54574

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 44..184
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 159..299

id T78111

est

(ix) FEATURE:

(A) NAME/KEY: other

WO 99/06554

(B) LOCATION:	182222
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(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 92

region 298..338

id T78111 est

195

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 220..254

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 337..371

id T78111

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 89..271

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 3.9

seq YTAVSVLAGPRWA/DP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 233:

GCGG	CGCG	GC C	GTAA	AGC	C CA	TTAC	GCAG	AGA	GAAA	GTT	ACGA	kg.a.a.ª	CT C	GTTT	'TCATC	60)
TTCT	TGG1	TT C	CATCI	TAAT:	CA CC	CAACG		let S					Sly S	CCC A Ser I -55		11:	2
			_			GCT Ala										16	0
						CCT Pro										20	8
						GTG Val -15										25	6
					_	CCT Pro	_									30	4
						GGG Gly										35	2
	TAT Tyr															35	8

(2) INFORMATION FOR SEQ ID NO: 234:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs



(B)	TYPE: NUCLE	CIC ACID
(C)	STRANDEDNES	S: DOUBLE
(D)	TOPOLOGY: L	INEAR

- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other(B) LOCATION: 294..347
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 94 region 297..350 id AA038489

est

- (ix) FEATURE:
 - (A) NAME/KEY: other(B) LOCATION: 134..347
 - (C) IDENTIFICATION METHOD: blastn
 (D) OTHER INFORMATION: identity 99

region 1..214 id AA111922

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
 (B) LOCATION: 284..331
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.5 seq TLMFSLTAQWXTS/RS
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 234:

AAAAAAAAGC TGCTGGACCC CAGGGAGAGC TGACCACTGC CCGAGCAGCC GGCTGAATCC 60 ACCTCCACAA TGCSGCTCTC AGGAACCCCG GYCCCTAATA AGAAGAGGAA ATCCAGCAAG 120 CTGATCATGG AACTCACTGG AGGTGGACAG GAGAGCTCAG GCTTGAACCT GGGCAAAAAG 180 ATCAGTGTCC CAAGGGATGT GATGTTGGAG GAACTGTCGC TGCTTACCAA CCGGGGCTCC 240 AAGATGTTCA AACTGSGGCA GATGAGGGTG GAGAAGTTTA TTT ATG AGA ACC ACC 295 Met Arg Thr Thr -15 CTG ATG TTT TCT CTG ACA GCT CAA TGG WTC ACT TCC AGA AGT TCC TTC Leu Met Phe Ser Leu Thr Ala Gln Trp Xaa Thr Ser Arg Ser Ser Phe 343 CAA 346 Gln 5



(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 35..384
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98 region 8..357 id H11129

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 43..346
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 16..319

id R11829

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 50..302
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 1..253 id R18811

La Kibbi

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 302..366
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 254..318

id R18811

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 183..371
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 6..194

id R10511

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide



- (B) LOCATION: 73..147
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 14.1 seq LTLLLLTLLAFA/GY

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 235:

ACT	GCGC	GGA	TCGG	CGTC	CG C	AGCG	GGCG	G CT	GCTG.	AGCT	GCC'	TTGA	GGT	GCAG	TGTTGG	60
GGA	TCCA	GAG (M	TG Teet See 25	CG G er A	AC C	TG C' eu L	eu L	TA C' eu L	TG G eu G	GC C	TG A' eu I	le G	GG GG Ly G	GC CTG ly Leu	111
ACT Thr	CTC Leu	TTA Leu -10	CTG Leu	CTG Leu	CTG Leu	ACG Thr	CTG Leu -5	CTG Leu	GCC Ala	TTT Phe	GCC Ala	GGG Gly 1	TAC Tyr	TCA Ser	GGG Gly	159
CTA Leu 5	CTG Leu	GCT Ala	GGG Gly	GTG Val	GAA Glu 10	GTG Val	AGT Ser	GCT Ala	GGG Gly	TCA Ser 15	CCC Pro	CCC Pro	ATC Ile	CGC Arg	AAC Asn 20	207
GTC Val	ACT Thr	GTG Val	GCC Ala	TAC Tyr 25	AAG Lys	TTC Phe	CAC His	ATG Met	GGG Gly 30	CTC Leu	TAT Tyr	GGT Gly	GAG Glu	ACT Thr 35	GGG Gly	255
CGG Arg	CTT Leu	TTC Phe	ACT Thr 40	GAG Glu	AGC Ser	TGC Cys	AGC Ser	ATC Ile 45	TCT Ser	CCC Pro	AAG Lys	CTC Leu	CGC Arg 50	TCC Ser	ATC Ile	303
GCT Ala	GTC Val	TAC Tyr 55	TAT Tyr	GAC Asp	AAC Asn	CCC Pro	CAC His 60	ATG Met	GTG Val	CCC Pro	CCT Pro	GAT Asp 65	AAG Lys	TGC Cys	CGA Arg	351
TGT Cys	GCC Ala 70	GTG Val	GGC Gly	AGC Ser	ATC Ile	CTG Leu 75	AGT Ser	GAA Glu	GGT Gly	GAG Glu						384

(2) INFORMATION FOR SEQ ID NO: 236:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 269 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 75...218
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97 region 29..172 id T64530

269

est

IIXI FLAIUNE	ix) FEATU	IRE	:
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(A) NAME/KEY: sig_peptide

(B) LOCATION: 36..131

- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 11.4

seq LWSLALWLPLALS/VS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 236:

AATCCGGACT GATAACCAGC CGGCCAGACT GAGGG ATG GAA GGC ACT GAG ATG 53

Met Glu Gly Thr Glu Met
-30

GGG GCC CGT CCA GGC GGA CAC CCG CRG AAA TGG AGC TTT CTG TGG TCT 101
Gly Ala Arg Pro Gly Gly His Pro Xaa Lys Trp Ser Phe Leu Trp Ser
-25 -20 -15

CTT GCA CTC TGG CTG CCT CTT GCC CTC TCT GTG TCT CTC TTT CTT GGT

Leu Ala Leu Trp Leu Pro Leu Ala Leu Ser Val Ser Leu Phe Leu Gly

-10

5

CTC TCC CTC TCT CCT CAG CCT GGT CTT TCT CTT TGG TGC ACA CTT 197
Leu Ser Leu Ser Pro Pro Gln Pro Gly Leu Ser Leu Trp Cys Thr Leu
10 15 20

AGT TAT TGT TGT GAG CAA TGG AAG TTC AAA GGA ACT CCC TCT CCA GCT

Ser Tyr Cys Cys Glu Gln Trp Lys Phe Lys Gly Thr Pro Ser Pro Ala

25

30

35

CTT CTG AAT CTK GGG ACA CGC GGG Leu Leu Asn Leu Gly Thr Arg Gly 40 45

(2) INFORMATION FOR SEQ ID NO: 237:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 395 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

- (A) NAME/KEY: other
- (B) LOCATION: 220..396
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98 region 207..383 id N28787 est



(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 108..207
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 95..194

id N28787

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 220..316
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 209..305

id AA019783

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 108..207
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 97..196

id AA019783

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 307..392
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 91

region 297..382

id AA019783

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 108..207
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 99..198

id H86396

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 307..374
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 300..367

id H86396

est

- (A) NAME/KEY: other
- (B) LOCATION: 255..313
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96 region 247..305

id H86396 est

(ix) FEATURE:

- (A) NAME/KEY: other
 (B) LOCATION: 220..336
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 210..326

id H86516

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 108..207
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 98..197

id H86516

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 327..368
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 318..359

id H86516

10 110

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 108..207
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 111..210

id AA059290

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 272..354
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 285..367

id AA059290

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 220..286
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 91

region 223..289

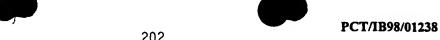
id AA059290

est

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 139..302
- (C) IDENTIFICATION METHOD: Von Heijne matrix

202

score 11.2



seq LLFALGSLGLIFA/LI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 237:

(D) OTHER INFORMATION:

ARC	GGTT	AGT	GGAC	CGGG	AC C	GGTA	VGGG	T GC	TGTW	GCCA	TCA	TGGC	TGA	cccc	GMMCC		60
CGG	BACM	CTC (GCTC	CTCG	AT C	GAGG.	ACGA	C TT	CANM	TMNG	GCA	GGCA	AGC	GTGG	ССТССС	3 1	20
CCA	CCGT	GYM :	BNTC	1					Arg	AAA (Lys '				Ile		1	70
TCT Ser	CTG Leu	CAG Gln	GTT Val	CTC Leu -40	TTA Leu	ACT Thr	ACA Thr	GTG Val	ACT Thr -35	Ser	ACA Thr	GTT Val	TTT Phe	TTA Leu -30		2	18
TTT Phe	GAG Glu	TCT Ser	GTA Val -25	CGG Arg	ACA Thr	TTT Phe	GTA Val	CMT Xaa -20	GAG Glu	AGT Ser	CCT Pro	GCC Ala	TTA Leu -15	ATT Ile	TTG Leu	2	66
CTG Leu	TTT Phe	GCC Ala -10	CTC Leu	GGA Gly	TCT Ser	CTG Leu	GGT Gly -5	TTG Leu	ATT Ile	TTT Phe	GCG Ala	TTG Leu 1	ATT Ile	TTA Leu	AAC Asn	3	14
AGV Xaa 5	CAT His	AAG Lys	TAT Tyr	CCC Pro	CTT Leu 10	AAC Asn	CTG Leu	TAC Tyr	CTA Leu	CTT Leu 15	TTT Phe	GGA Gly	TTT Phe	ACG Thr	CTG Leu 20	3	62
	GMA Xaa															3	95

(2) INFORMATION FOR SEQ ID NO: 238:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 156 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 53..155
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 24..126 id AA075942

- (ix) FEATURE:
 - (A) NAME/KEY: other

- 1	

(B)	LOCATION:	66.	.136
-----	-----------	-----	------

- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 37..107 id AA262924 est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 22..135
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 10.8

seq MLLLLLLGSGQG/PQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 238:

AAAGGGTCGT TGGTGGGAAA G ATG GCG GCG ACT CTG GGA CCC CTT GGG TCG

Met Ala Ala Thr Leu Gly Pro Leu Gly Ser

-35

-30

TGG CAG CAG TGG CGA TGT TTG TCG GCT CGG GAT GGG TCC AGG ATG

Trp Gln Gln Trp Arg Arg Cys Leu Ser Ala Arg Asp Gly Ser Arg Met

-25

-15

TTA CTC CTT CTT TTG TTG GGG TCT GGG CAG GGG CCA CAG CAA GTC

Leu Leu Leu Leu Leu Leu Gly Ser Gly Gln Gly Pro Gln Gln Val

-10

-5

147

GGG GCG GGG
Gly Ala Gly
5

(2) INFORMATION FOR SEQ ID NO: 239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(64..95)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 79..110

id N98118

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

PCT/IB98/01238

204	

- (B) LOCATION: 195..317
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 9.9

seq ILPFLLFPFPVNA/RS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 239:

ATAGTGATCC TTTTCCTTCT CCCACTCCGT AAGTTTCTAT CCTTGGCCTC CTATTCTTTT TACTACATAT ATACTTTATA TATACATATA TACTTGGAAC AGGCTTAATG AGTTCCAAGG 120 TTTCAAGTAT AATAGAAGGA TAGTTTCCCT AATATTTCTT CAAAACAGAT TTCTCTTCTG 180 AAATCCAGAG TCAT ATG TCC AGT TGG ATG TAT CTT GGA TAC CCC ATT GTC 230 Met Ser Ser Trp Met Tyr Leu Gly Tyr Pro Ile Val -40 ACC TCA AAC ACT ACT TGT CTA AAA CTG ATC TCA TCA TCT TTT CCC CAA Thr Ser Asn Thr Thr Cys Leu Lys Leu Ile Ser Ser Ser Phe Pro Gln ATC CTT CCT TTT CTT CTA TTT CCC TTC CCA GTG AAT GCC AGA TCT CAC 326 Ile Leu Pro Phe Leu Leu Phe Pro Phe Pro Val Asn Ala Arg Ser His -10 TYA GTT GCT CAA ACT AAA AGC CCG AGG 353 Xaa Val Ala Gln Thr Lys Ser Pro Arg

(2) INFORMATION FOR SEO ID NO: 240:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 159 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 88..132
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 352..396 id AA021024

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 46..108
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.7 seq QLCLLLLPSCSLS/VS



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 240:

ACCTCTTGGG GCCTACTTTG GGATGAAGTR GCCTCCCTCA GCAGC ATG GCC CCT GGG

Met Ala Pro Gly
-20

GTC ATC ATC ATC CAG CTC TGC CTC TTG CTC CTG CCT TCC TGC TCC CTT

Val Ile Ile Ile Gln Leu Cys Leu Leu Leu Pro Ser Cys Ser Leu
-15

TCT GTT TCC GGA TGT TCC TGC CCT AGT GCC TGC TTC AGC ACC AGC
Ser Val Ser Gly Cys Ser Cys Pro Ser Ala Cys Phe Ser Thr Thr Ser
1

CGC GAG
Arg Glu

(2) INFORMATION FOR SEQ ID NO: 241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 283..322
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 179..213 id N78639

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 283..322
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 193..232 id AA150442

est

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 99...377
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 9.6 seq LSLSLGASAPVQC/QQ



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 241:

ACATGCTCAG GGTCAGGTTC CAGCCCCAGC TGAGGGCTGA GGGGAGTGGG TGGACATGGG												
GCAGGGAC	GCT GGAA	GAACAC T	CGAGAGAC	A GC.	AGGT				is G		TT ATT he Ile	116
CAG CAG Gln Gln	CAG TTT Gln Phe -85	TCA TTA Ser Leu	ACA GCT Thr Ala -80	Phe	TCA Ser	MAC Xaa	STT Xaa	WRG Xaa -75	SCW Xaa	ATC Ile	TTC Phe	164
ACA CTG Thr Leu -70	KST GSC Xaa Xaa	CTG TCT Leu Ser	CAG TTG Gln Leu -65	CTT Leu	AGT Ser	TCA Ser	GCA Ala -60	GCT Ala	CCC Pro	AAA Lys	CAC His	212
ACA GCT Thr Ala -55	GCA CCG Ala Pro	ACG GCC Thr Ala -50	CTC CCT Leu Pro	TGC Cys	CTT Leu	CAG Gln -45	GGT Gly	CAG Gln	CAG Gln	CTT Leu	AAC Asn -40	260
TCT CTC Ser Leu	TCT CTG Ser Leu	GGC ACA Gly Thr -35	AGT GAG Ser Glu	CTG Leu	AGC Ser -30	TGT Cys	GTC Val	CTG Leu	GCT Ala	TCC Ser -25	TCC Ser	308
TGT CTA Cys Leu	TCT ACA Ser Thr -20	AAG ACA Lys Thr	GAC CCC Asp Pro	TCT Ser -15	GGT Gly	CTC Leu	TCT Ser	CTC Leu	TCT Ser -10	TTG Leu	GGT Gly	356
GCC AGC Ala Ser	GCA CCT Ala Pro -5	GTA CAG Val Gln	TGT CAG Cys Gln l	CAG Gln	GAC Asp	AAT Asn	TAT Tyr 5	ACC Thr	TTT Phe	TGC Cys	KNN Xaa	404
CAA TAC Gln Tyr 10												428

(2) INFORMATION FOR SEQ ID NO: 242:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 370 base pairs
 - (3) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 325..371
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95 region 277..323 id AA015589

est

(ix	FEATUR	Ξ:
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- (A) NAME/KEY: other
- (B) BOCATION: 325..371
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 277..323

id AA019963

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 140..262
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 9.5

seq LIIFLSFLPFINS/SF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 242:

ACAAGTGGGA TAGGTCCTGT GACAGAATTG TGTGATACAG GTCAAACAGG AGTTGGGTTA	60
TGGGGAAAAT GCCAGTTGAA ATATGTTTTG ATCTTTGGAG AAACCTATTT TTTCATTTAA	120
CCTGTTCTTT AAATCCAGT ATG TTC CAG AAC ATA CAA AAA TGT TTA AAT GTT Met Phe Gln Asn Ile Gln Lys Cys Leu Asn Val -40 -35	172
CCA TTT GTA AGA GGA TAT CAT GTA TTT TAT ATC AAT TTA AAT GCA GTT Pro Phe Val Arg Gly Tyr His Val Phe Tyr Ile Asn Leu Asn Ala Val -30 -25 -20 -15	220
ATC CTA ATC ATT TTT CTT TCA TTT TTA CCC TTT ATT A	268
GTT TAC AAA ACA AAT CCA CTC TAT GAC GCA ATC TCT AAT TAT GTG TTT Val Tyr Lys Thr Asn Pro Leu Tyr Asp Ala Ile Ser Asn Tyr Val Phe 5 10 15	316
TCT TTC AGG TAT CCA AAC CTT GRA ASC TTT GCT CTA GAT GTC AGG CTT Ser Phe Arg Tyr Pro Asn Leu Xaa Xaa Phe Ala Leu Asp Val Arg Leu 20 25 30	364
GTT TTT	370

(2) INFORMATION FOR SEQ ID NO: 243:

Val Phe

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 361 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA



- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement (215..358)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 165..308

id R98055

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 185..289
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 252..356

id W23510

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 136..186
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 202..252

id W23510

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 73..109
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 139..175

id W23510

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 315..352
 - (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 92

region 385..422

id W23510

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement(215..358)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 144..287

id T46976

- (ix) FEATURE:
 - (A) MAME/KEY: other



(B)	LOCATION: complement (22735	8)
(C)	IDENTIFICATION METHOD: blast	n .
(D)	OTHER INFORMATION: identity	9 9
	region 1	67298
	id AA084	768

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: complement(248..358)

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 169..279

id R50108

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: complement (215..250)

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 94

region 278..313

id R50108

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide(B) LOCATION: 281..340

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 9.2

seq FPVLALFLSGSLA/LF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 243:

AGAGTGAGAC GGGCAGATGG AGGAGGGATT GTAATGGCGG YAGCGGCAGC TCCCSTGCTC	60
TGACCCACGG CAGGCATACA GCATCCGATT TAATCTGGAT CCATTCCGGC GCCTTCCTCT	120
CCCAGTCACC CAGAGGGCCC CAACCCCGGC GGCCCTTTCT TCCTCAAATG TCCTCGGCTC	180
TATACCGTGC CTGGGTCTTT TCTCTTTCTC TCTGCCTGGA AGATTCCTTC TTTCCCCTTT	240
TGTCTTGCCC ACTCCTGTTT ACCCTTCAAG TTTCAAGTTC ATG TCA CTG TCT CAG Met Ser Leu Ser Gln -20	295
AGA GGT TTT CCT GTG CTC GCC CTG TTT CTC TCA GGA AGC CTT GCT CTT Arg Gly Phe Pro Val Leu Ala Leu Phe Leu Ser Gly Ser Leu Ala Leu -15 -5 1	343
TTC CAT CAT ACC TCT GGG Phe His His Thr Ser Gly 5	361

(2) INFORMATION FOR SEQ ID NO: 244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs



- (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 19..132
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 99

region 1..114

id N87112

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 194..267
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 94

region 174..247

id N87112

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 130..195
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 111..176

id N87112

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 68..267
 - (C) IDENTIFICATION METHOD: blastn
 - (D) CTHER INFORMATION: identity 99

region 1..200

id T68050

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 63..209
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95

region 1..147 id AA157180

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 66..195
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 1..130 id AA094982

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(A) NAME/KEY: other
(B) LOCATION: 190..264

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 5..79 id W00395

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 59..145

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 8.9

seq ALLIVCDVPSASA/QR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 244:

ACC	CACCO	CTC F	GACC	CTAGO	CC GG	SAGC	AAGI	TTC	CACTI	ATA	GAA	GGAC	GAG A	AAGCO	SAAC	58
			CGT Arg													106
			ATC Ile -10													154
			GTG Val													202
			CCT Pro													250
			CCA Pro													268

(2) INFORMATION FOR SEQ ID NO: 245:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 328 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney



(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 131..327
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 45..241 id H81225

est.

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 86..123
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..38

id H81225

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 121..327
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 2..208

id W01412

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 129..327
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..199

id AA044118

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 131..327
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 13..209

id W42797

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 209..327
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 95..213

id R39635

est

- (A) NAME/KEY: other
- (B) LOCATION: 130..209
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98 region 15..94

id R39635 est

(i	х)	FEATURE	:
١.	_	••	,	LUNIONE	

(A) NAME/KEY: sig_peptide

(B) LOCATION: 191..286

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 8.8

seq VPMLLLIVGGSFG/LR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 245:

AACAAGTATG TTACGATGGC TCGATTGCTT TTGCCTAGCG GAAACCATTC ACTAAGGACC 60 GAGCACCAAA TAACCAAGGA AAAGGAAGTG AGTTAAGGAC GTACTCGTCT TGGTGAGAGC 120 GTGAGCTGCT GAGATTTGGG AGTCTGCGCT AGGCCCGCTT GGAGTTCTGA GCCGATGGAA 180 GAGTTCACTC ATG TTT GCA CCC GCG GTG ATG CGT GCT TTT CGC AAG AAC 229 Met Phe Ala Pro Ala Val Met Arg Ala Phe Arg Lys Asn -30 -25 AAG ACT CTC GGC TAT GGA GTC CCC ATG TTG TTG CTG ATT GTT GGA GGT 277 Lys Thr Leu Gly Tyr Gly Val Pro Met Leu Leu Leu Ile Val Gly Gly -15-5 TCT TTT GGT CTT CGT GAG TTT TCT CNA ATC CGA TAT GAT GCT GTG AAG 325 Ser Phe Gly Leu Arg Glu Phe Ser Xaa Ile Arg Tyr Asp Ala Val Lys 1 GGG 328 Gly

(2) INFORMATION FOR SEQ ID NO: 246:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 378 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 106..210
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 104..208 id AA131932

- (ix) FEATURE:
 - (A) NAME/KEY: other



- (B) LOCATION: 298..342
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95

region 293..337 id AA131932

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 86..291
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 67..272 id AA001989

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 29..102
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 11..84 id AA001989

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 102..331
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 76..305

id W32996

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 55..96
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 31..72

id W32996

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 236..377
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 165..306

id AA121218

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 106..235
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99 region 34..163

id AA121218

PCT/IB98/01238 WO 99/06554

- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: 70..180
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.5

seq LLVLLLYAPVGFC/LL

378

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 246:

AAGAGCSSCT GCGGCCGGGC GCGAAAATGG CGGCGGCGGC GACGGCCNGG CGCTCCTGAA

GCAGCAGTT ATG GAG CTT CCC TCA GGG CCG GGG CCG GAG CGG CTC TTT GAC Met Glu Leu Pro Ser Gly Pro Gly Pro Glu Arg Leu Phe Asp -35 -30

TCG CAC CGG CTT CCG GGT GAC TGC TTC CTA CTG CTC GTG CTG CTC Ser His Arg Leu Pro Gly Asp Cys Phe Leu Leu Leu Val Leu Leu

TAC GCG CCA GTC GGG TTC TGC CTC CTC GTC CTG SGC CTC TTT CTC GGG 207 Tyr Ala Pro Val Gly Phe Cys Leu Leu Val Leu Xaa Leu Phe Leu Gly

ATC CAC GTC TTC CTG GTC AGC TGC GCG CTG CCA GAC AGC GTC CTT CGC 255 Ile His Val Phe Leu Val Ser Cys Ala Leu Pro Asp Ser Val Leu Arg

AGA TTC GTA GTG CGG ACC ATG TGT GCG GTG CTA GGG CTC GTG GCC CGG 303 Arg Phe Val Val Arg Thr Met Cys Ala Val Leu Gly Leu Val Ala Arg 30

CAG GAG GAC TCC GGA CTC CGG GAT CAC AGT GTC AGG GTC CTC ATT TCC 351 Gln Glu Asp Ser Gly Leu Arg Asp His Ser Val Arg Val Leu Ile Ser 45

AAC CAT GTG ACA CCT TTC GAC CAC CAG Asn His Val Thr Pro Phe Asp His Gln 60

(2) INFORMATION FOR SEQ ID NO: 247:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 381 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 38..181
 - (C) IDENTIFICATION METHOD: blastn



(D) OTHER INFORMATION: identity 97

region 1..144

. id W60505

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 186..312
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 150..276

id W60505

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 305..346
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 270..311

id W60505

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 38..312
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 1..275

id W60589

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 305..346
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 269..310

id W60589

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 32..175
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 1..144

id R33763

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 176..261
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 144..229

id R33763

est

(ix) FEATURE:

(A) NAME/KEY: other



- (B) LOCATION: 268..312
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 91

region 238..282

id R33763

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 305..337
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 276..308

id R33763

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 33..176
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 3..146 id AA123856

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 181..346
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 88..253 id HSB31E112

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 93..181
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 1..89

id HSB31E112

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 106..375
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 8.4

seq SLVLLTVTPSXRQ/QE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 247:

AGGACTTCCC CCGGGCTGAG CTGCGCASGG GGTTTTGGCC AAATTGGGCG AGGGCACAAA

ATAACCACTT ACCCCTTCTC ACCGAGGAAG AGCGGGAGAA AGGGT ATG GCA CAG TCA 117

Met Ala Gln Ser

-90

CAA GGG TGG GTG RAA AGR TAC KTC AAG GCC TTT TGT AAA GGC TTC TTT Gin Gly Trp Val Xaa Arg Tyr Xaa Lys Ala Phe Cys Lys Gly Phe Phe 165 **-85 -80 -75**

GTG GCG GTG CCT GTG GCA GTG ACT TTC TTG GAT CGG GTC GCC TGT GTG 213 Val Ala Val Pro Val Ala Val Thr Phe Leu Asp Arg Val Ala Cys Val -65 GCA AGA GTA GAA GGA GCA TCG ATG CAG CCT TCT TTG AAT CCT GGG GGG 261 Ala Arg Val Glu Gly Ala Ser Met Gln Pro Ser Leu Asn Pro Gly Gly -50 -45 AGC NAG TCA TCT GAT GTG GTG SDD DTG AAC CAC TGG AAA GTG AGG AAT 309 Ser Xaa Ser Ser Asp Val Val Xaa Xaa Asn His Trp Lys Val Arg Asn -35 -30 TTT GAA GTA CAC CGT GGT GAC ATT GTA TCA TTG GTG TTG CTC ACT GTG 357 Phe Glu Val His Arg Gly Asp Ile Val Ser Leu Val Leu Leu Thr Val -15 -20 ACG CCC TCC ASC CGA CAA CAG GAG 381

(2) INFORMATION FOR SEQ ID NO: 248:

Thr Pro Ser Xaa Arg Gln Gln Glu

-5

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 321 base pairs

1

- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 11..158
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 93

region 11..158

id H56585

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 201..322
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 201..322

id H56585

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 151..322
 - (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 93

region 119..290

. id AA147898

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 39..159
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 8..128 id AA147898

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 201..322
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 83..204

id R52248

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 170..202
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 51..83

id R52248

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 177..264
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 87..174

id H54950

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 284..315
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 192..223

id H54950

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(199..320)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 40..161

id W22146

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

PCT/IB98/01238 220

- (B) LOCATION: 67..135
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 8.1 seq WLLVLSFVFGCNV/LR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 248:

AGCCGCTGTT		GTT	GTTG	TTGTGGTCC CCATGGAGCT GCCGTAGCGG ACCCAGCACA GCCAGGAGC									G 60	60			
TCC	GGG	ATG Met	AGC Ser	TCA Ser	GCC Ala -20	GCG Ala	GCC Ala	GAC Asp	CAC His	TGG Trp -15	GCG Ala	TGG Trp	TTG Leu	Leu '	GTG Val -10		108
CTC Leu	AGC Ser	TTC Phe	GTG Val	TTT Phe	Gly	TGC Cys	AAT Asn	GTT Val	CTT Leu 1	AGG Arg	ATC Ile	CTC Leu	CKC Xaa 5	CCG Pro	GBC Xaa		156
YTC Xaa	STM Xaa	ATC Ile	Хаа	CAK Xaa	GTC Val	CAG Gln	GGT Gly 15	Ala	GCA Ala	GAA Glu	GGA Gly	CGC Arg 20	G1 y	SAG Xaa	GAG Glu		204
TCA Ser	CAG Gln 25	Met	AGA Arg	GCG Ala	GAG Glu	ATC Ile 30	Gln	GAC Asp	ATG Met	AAG Lys	CAG Gln 35	GAG Glu	CTC Leu	TCC Ser	ACA Thr		252
GTC Val 40	AAC Asn	ATG Met	ATG Met	GAC Asp	GAG Glu 45	Phe	GCC Ala	AGA Arg	TAT Tyr	GCC Ala 50	AGG Arg	CTG Leu	GAN Xaa	AGA Arg	AAG Lys 55		300
			ATG Met		Asp												321

(2) INFORMATION FOR SEQ ID NO: 249:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 382 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 196..382
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98 region 10..196 id HSC2EA121

est

est

(B) LOCATION: 121..205
 (C) IDENTIFICATION METHOD: blastn
 (D) OTHER INFORMATION: identity 100 region 134..218 id AA095017

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 197..252

(A) NAME/KEY: other

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 92

region 209..264 id AA095017

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide
(B) LOCATION: 281..340

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 8

seq HVFFLLLLAHIIA/LE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 249:

GTTTTTGTTT GTGTGCGT GTTGTTGGCC TCCATCCCCA CTCCCCAGAC TCCACTTCTC CAGGCCTCTC TCCCGCCTTT TCATCCCGCA TCCGCAGGAC ACCCAATCAC CGGGGCAACA 120 GGATGCCTTC CGCGCCTTCC ACCCTGACCT GGAATTCGTG GGCAAGTTCT TGAAACCCCT 180 GCTGATTGGT GAACTGGCCC CGGAGGAGCC CAGCCAGGAC CACGGCAAGA ACTCAAAGAT CACTGAGGAC TTCCGGGCCC TGAGGAAGAC GGCTGAGGAC ATG AAC CTG TTC AAG 295 Met Asn Leu Phe Lys -20 ACC AAC CAC GTG TTC TTC CTC CTC CTG GCC CAC ATC ATC GCC CTG Thr Asn His Val Phe Phe Leu Leu Leu Leu Ala His Ile Ile Ala Leu -15 -10-5 GAG AGC ATT GCA TGG TTC ACT GTC TTT TAC TTT GGC AAT 382 Glu Ser Ile Ala Trp Phe Thr Val Phe Tyr Phe Gly Asn 5

(2) INFORMATION FOR SEQ ID NO: 250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens

PCT/IB98/01238

(F) TISSUE TYPE: Dystrophic muscle

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 80..300
- (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100

region 101..321

id H21228

est

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 60..300
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 117..357

id R72127

est

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 19..59
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 77..117

id R72127

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 60..204
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 63..207

id H18908

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 195..269
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 199..273

id H18908

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 19..59
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 23..63

id H18908

est

- (A) NAME/KEY: other
- (B) LOCATION: 65..203
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

223

region 144..282 id W93461 est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 19..59

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 100

region 98..138

id W93461

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 252..288

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 333..369

id W93461

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 228..259

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 90

region 308..339

id W93461

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 136..300

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 93..257 id HUMO85F04B

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 170..241

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 7.9

seq LLLPRVLLTMASG/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 250:

AATCACGTGG CTGCCACCCA GGGGCATTCT TCGGGGGTGC ATCAGAGGGA GGGCAGAGCC 60

TGAGGATCTA AGCGAAGGCT TCCCCGGGTG TAATTTCCTG GGCTGTTTGT GAGGAGAGAT 120

CGAATTCGCC TCCTGCTCTC AGGCCTCTCT GCTCCTGTCT TTTGTTTGG ATG CCG GCG 178

Met Pro Ala

-20 -15 -10

ACC ATG GCC TCT GGA AGC CCT CCG ACC CAG CCC TCG CCG GCC TCG GAT

Thr Met Ala Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro Ala Ser Asp

-5

10

27

TCC GGC TCT GGC TAC GTT CCG GGC Ser Gly Ser Gly Tyr Val Pro Gly 15

298

(2) INFORMATION FOR SEQ ID NO: 251:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 288 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 1..286
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 99 region 1..286

id HUM085F04B

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 147..245
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 167..265

id R64509

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 99..161
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 93

region 118..180

id R64509

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 245..286
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 266..307

id R64509

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 147..262
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 182..297 id H85714

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 99..161
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 133..195

id H85714

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 95..286
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 159..350

id H21228

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 201..286
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 151..236

id AA009893

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 148..206
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 97..155 id AA009893

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 99..160
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 91

region 49..110 id AA009893

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 1..198
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 7.9

seq LLLPRVLLTMASG/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 251:

ATG Met	ATA Ile -65	GGG Gly	TCG Ser	GGA Gly	TTG Leu	GCT Ala -60	GGC Gly	TCT Ser	GGA Gly	GGC Gly	GCA Ala -55	GGT Gly	GGT Gly	CCT Pro	TCT Ser	48
TCT Ser -50	ACT Thr	GTC Val	ACA Thr	TGG Trp	TGC Cys -45	GCG Ala	CTG Leu	TTT Phe	TCT Ser	AAT Asn -40	CAC His	GTG Val	GCT Ala	GCM Ala	ACC Thr -35	96
CAG Gln	GCC Ala	TCT Ser	CTG Leu	CTC Leu -30	CTG Leu	TCT Ser	TTT Phe	GTT Val	TGG Trp -25	ATG Met	CCG Pro	GCG Ala	CTG Leu	CTG Leu -20	CCT Pro	144
GTG Val	GCC Ala	TCC Ser	CGC Arg -15	CTT Leu	TTG Leu	TTG Leu	CTA Leu	CCC Pro -10	CGA Arg	GTC Val	TTG Leu	CTG Leu	ACC Thr -5	ATG Met	GCC Ala	192
TCT Ser	GGA Gly	AGC Ser 1	CCT Pro	CCG Pro	ACC Thr	CAG Gln 5	CCC Pro	TCG Ser	CCG Pro	GCC Ala	TCG Ser 10	GAT Asp	TCC Ser	GGC Gly	TCT Ser	240
GGC Gly 15	TAC Tyr	GTT Val	CCG Pro	GGC Gly	TCG Ser 20	GTC Val	TCT Ser	GCA Ala	GCC Ala	TTT Phe 25	GTT Val	ACT Thr	TGC Cys	CCC Pro	AGG Arg 30	288

(2) INFORMATION FOR SEQ ID NO: 252:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 322 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 32..319

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 99

region 53..340

id AA056366

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 32..319

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 99

region 80..367

id R77008



WO 99/06554

(A) NAME/KEY: other(B) LOCATION: 32..223

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 77..268

id W75983

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 223..319

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 269..365

id W75983

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 32..223

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 129..320

id W39055

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 223..319

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 321..417

id W39055

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 32..236

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 84..288

id N48534

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 264..319

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 92

region 318..373

id N48534

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 11..82

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 7.9

seq LLLPRVLLTMASG/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 252:

ATT'	rgtt:	rgg .	ATG Met	CCG Pro	GCG Ala	Leu	CTG Leu -20	CCT Pro	GTG Val	GCC Ala	TCC Ser	CGC Arg -15	CTT Leu	TTG Leu	TTG Leu	49
CTA Leu	CCC Pro -10	CGA Arg	GTC Val	TTG Leu	CTG Leu	ACC Thr -5	Met	GCC Ala	TCT Ser	GGA Gly	AGC Ser 1	CCT Pro	CCG	ACC Thr	CAG Gln 5	97
CCC Pro	TCG Ser	CCG Pro	GCC Ala	TCG Ser 10	Asp	TCC Ser	GGC Gly	TCT Ser	GGC Gly 15	Tyr	GTT Val	CCG Pro	GGC Gly	TCG Ser 20	GTC Val	145
TCT Ser	GCA Ala	GCC Ala	TTT Phe 25	GTT Val	ACT Thr	TGC Cys	CCC Pro	AAC Asn 30	Glu	AAG Lys	GTC Val	GCC Ala	AAG Lys 35	GAG Glu	ATC Ile	193
GCC Ala	AGG Arg	GCC Ala 40	GTG Val	GTG Val	GAG Glu	AAG Lys	CGC Arg 45	CTA Leu	GCA Ala	GCC Ala	TGC Cys	GTC Val	Asn	CTC Leu	ATC Ile	241
CCT Pro	CAG Gln 55	ATT Ile	ACA Thr	TCC Ser	ATC Ile	TAT Tyr 60	GAG Glu	TGG Trp	AAA Lys	GGG Gly	AHG Xaa 65	Ile	GAG Glu	GAA Glu	GAC Asp	289
							AAA Lys									322

(2) INFORMATION FOR SEQ ID NO: 253:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 395 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 138..193
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 247..302

id T80036

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide(B) LOCATION: 33..308

PCT/IB98/01238

395

229

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 7.6

. seq FLLLTVALLASYS/VH

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 253:

AAGATGGAAC TGGTAGTCAG CTGGAGAGCA GC ATG GAG GCG TCC TGG GGG AGC Met Glu Ala Ser Trp Gly Ser -90 TTC AAC GCT GAG CGG GGC TGG TAT GTC TCT GTG CAG CAG CCT GAA GAA 101 Phe Asn Ala Glu Arg Gly Trp Tyr Val Ser Val Gln Gln Pro Glu Glu GCG GAG GCC GAA GAG TTG AGT CCG TTG CTA AGC AAC GAA CTT CAC AGA 149 Ala Glu Ala Glu Glu Leu Ser Pro Leu Leu Ser Asn Glu Leu His Arg -60 CAG CGA TCC CCA GGT GTT TCA TTT GGT TTA TCA GTG TTT AAT TTG ATG Gln Arg Ser Pro Gly Val Ser Phe Gly Leu Ser Val Phe Asn Leu Met -50-45 AAT GCC ATC ATG GGA AGT GGC ATC CTT GGC TTA GCT TAT GTT ATG GCT 245 Asn Ala Ile Met Gly Ser Gly Ile Leu Gly Leu Ala Tyr Val Met Ala -35 AAT ACC GGT GTC TTT GGA TTT AGC TTC TTG CTG CTG ACA GTT GCT CTC 293 Asn Thr Gly Val Phe Gly Phe Ser Phe Leu Leu Leu Thr Val Ala Leu -20 CTG GCT TCT TAC TCA GTC CAT CTT CTG CTT AGT ATG TGT ATT CAG ACA 341 Leu Ala Ser Tyr Ser Val His Leu Leu Leu Ser Met Cys Ile Gln Thr **-**5 1 GCT GTA ACA TCT TAT GAA GAT CTT GGA CTC TTT GCA TTT GGA TTA CCT 389 Ala Val Thr Ser Tyr Glu Asp Leu Gly Leu Phe Ala Phe Gly Leu Pro

(2) INFORMATION FOR SEQ ID NO: 254:

GGA CTG

Gly Leu

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 18..132 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 95 region 1..115 id T10447

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide (B) LOCATION: 78..128

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 7.6

seq FFLLLRFFLRIDG/VP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 254:

ATTTTGAAGA AGTTCTCCTT TTTGAGGATG AACTTCATGA TCATGGAGTT TCAAGCCTGA

GTGTGAAGAT TAGAGTA ATG CCT TCT AGC TTT TTC CTG CTG TTG CGG TTT 110 Met Pro Ser Ser Phe Phe Leu Leu Arg Phe -15 -10

TTC TTG AGA ATT GAC GGG GTG CCG Phe Leu Arg Ile Asp Gly Val Pro -5

134

(2) INFORMATION FOR SEQ ID NO: 255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 44..276
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 1..233

id N83601

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 51..276
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 92

region 15..240

id N56180

est



- (A) NAME/KEY: other(B) LOCATION: 69..216
- (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 95

region 23..170

id R57553

est

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 46..75
- (C) IDENTIFICATION METHOD: blastn
 (D) OTHER INFORMATION: identity 96

region 1..30

id R57553

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 58..142
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 42..126

id R57171

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 18..56
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 1..39

id R57171

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 142..182
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 97..137

id N88966

est

(ix) FEATURE:

- (A) NAME/KEY: other
 (B) LOCATION: 49..83
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..35

id N88966

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 200..256
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 7.6

seq FIVGIYFLSSCRA/EE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 255:

AGTC	TTTG	TC C	CTGAG	CCCA	C GA	TTCC	AGAG	CŢG	GCTG	GAC	CCAA	GGAG	GT (SAAGA	GTCAC	60
тттт	CAGC	cc c	CAGGA	AGGG	C AA	AGAA	.GAGA	GAR	AATC	AGC	CTGT	CTGC	TC T	CTCC	TTGGC	120
TCAA	CAAG	GC (CTCTA	ACAG	т ст	TCTG	TCCT	CTA	TTCT	GCA	CACG	GCAT	'AT	rtgge	SAACGA	180
GAAA	CAAA	AG 1	ΤΤΤΤ	CCAA						Leu					ATT / Ile	232
														CCC Pro		280
														TTC Phe		328
	GTT Val															337

(2) INFORMATION FOR SEQ ID NO: 256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 327 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Muscle

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 98..223

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 57..182 id AA019348

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 215..329

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 173..287

id AA019348

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 43..98

(C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 96

region 1..56 id AA019348

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 98..217
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 99

region 57..176 id AA013099

est

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 211..329
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 171..289 id AA013099

est

(ix) FEATURE:

- (A) NAME/KEY: other
 (B) LOCATION: 43..98
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 1..56 id AA013099

est

(ix) FEATURE:

- (A) NAME/KEY: other
 (B) LOCATION: 215..319
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 130..234

id R54717

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 142..223
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 58..139

id R54717

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 95..149
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 10..64

id R54717

est

(A) NAME/KEY: other
(B) LOCATION: 105..173

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 98

region 1..69 id AA112675

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 215..267

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 92

region 108..160 id AA112675

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 296..329

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 94

region 185..218 id AA112675

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 167..196

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 93

region 62..91 id AA112675

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 88..223

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 91 region 3..138

id H27167

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 215..319

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 98

region 129..233

id H27167

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 145..213

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 7.4

seq VLLLAALPPVLLP/GA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 256:

AGAGTG	TTCG	CCGC	CGCC	GC G	GCCG	CCAC	C TG	GAGT	TTCT	TCA	GACT	CCA	GATT	TCCCTG	60
														CTCTTT	
CAGCCC	GGGA	TCGC	CCCA	GC A	GGG ,	ATG (GGC (Asp	AAG Lys -20	ATC Ile	TGG (CTG (Leu	Pro	TTC Phe -15	171
CCC GT Pro Va	G CTC l Leu	CTT Leu	CTG Leu -10	GCC Ala	GCT Ala	CTG Leu	CCT Pro	CCG Pro -5	GTG Val	CTG Leu	CTG Leu	CCT Pro	GGG Gly 1	GCG Ala	219
GCC GG Ala Gl	C TTC y Phe 5	ACA Thr	CCT Pro	TCC Ser	CTC Leu	GAT Asp 10	AGC Ser	GAC Asp	TTC Phe	ACC Thr	TTT Phe 15	ACC Thr	CTT Leu	CCC Pro	267
GCC GGG Ala Gly 20	y Gin	AAG Lys	GAG Glu	TGC Cys	TTC Phe 25	TAC Tyr	CAG Gln	CCC Pro	ATG Met	CCC Pro 30	CTG Leu	RAG Xaa	GCC Ala	TCG Ser	315
CTG GAC Leu Glu 35															327

(2) INFORMATION FOR SEQ ID NO: 257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 476 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 166..415

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 1..250

id HSU52870

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 182..337

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 94 region 156..311

id T35951

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 32..132
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 7..107 id T35951

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 136..193
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 109..166

id T35951

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 182..328
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 156..302

id T35949

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 32..132
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 7..107 id T35949

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 136..193
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 109..166 id T35949

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 233..409
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 53..229

id W17267

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 401..476
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96 region 220..295

id W17267

est

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1	ix	١.	FEATUR	F .

- (A) NAME/KEY: other
 (B) LOCATION: 182..399
- (C) IDENTIFICATION METHOD: blastn
 (D) OTHER INFORMATION: identity 96

region 54..271 id HSC34G011

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 136..192
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96 region 7..63

id HSC34G011

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 306..416
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 7.3

seq LLSACLVTLWGLG/EP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 257:

AATTCATTTT TCACTCCTCC CTCCTAGGTC ACACTTTTCA GAAAAAGAAT CTGCATCCTG	60
GAAACCAGAA GAAAAATATG AGACGGGGAA TCATCGTGTG ATGTGTGTGC TGCCTTTGGC	120
TKWGTGTGTK GAAGTYCCKG CTCAGGTGTT AGGTACAGTG TGTTTGATCG TGGTGGCTTG	180
AGGGGAACCC GCTGTTCAGA GCTGTGACTG CGGCTGCACT CAGAGAAGCT GCCCTTGGCT	240
GCTCGTAGCG CCGGGCCTTC TCTCCTCGTC ATCATCCAGA GCAGCCAGTG TCCGGGAGGC	300
ADVNG ATG CCC CAC TCC AGC CTG CAT CCA TCC ATC CCG TGT CCC AGG GGT Met Pro His Ser Ser Leu His Pro Ser Ile Pro Cys Pro Arg Gly -35	350
CAC GGG GCC CAG AAG GCA GCC TTG GTT CTG CTG AGT GCC TGC CTG GTG His Gly Ala Gln Lys Ala Ala Leu Val Leu Leu Ser Ala Cys Leu Val -20 -15 -10	398
ACC CTT TGG GGG CTA GGA GAG CCA CCA GAG CAC ACT CTC CGG TAC CTG Thr Leu Trp Gly Leu Gly Glu Pro Pro Glu His Thr Leu Arg Tyr Leu -5 1 5 10	446
GTG CTC CAM CTA GCC TCC CTG CAG CTG GGA Val Leu Xaa Leu Ala Ser Leu Gln Leu Gly 15 20	476

(2) INFORMATION FOR SEQ ID NO: 258:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 220 base pairs (B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Dystrophic muscle

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (28..221)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 32..225 id AA025879

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (1..154)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 97..250 id N33067

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (144..221)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 31..108 id N33067

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(1..221)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 31..251 id AA132495

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(1..221)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 31..251 id AA063545

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (28..221)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 47..240 id N99132 est

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(i>	- 1		7 17 1	JRE :
(1)	()	P P. /	411	1 K F. *

(A) NAME/KEY: sig_peptide
(B) LOCATION: 59..145

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 7.3

seq HLLLLLLPAPTLK/GL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 258:

ACACTCGGGC CCCACTCAAG GATGTAGGGC CTTTTCTGGC CCCTGACCCC TCCCTGGC											58					
ATG Met	GGA Gly	GCG Ala	TGG Trp	GGA Gly -25	CGG Arg	GGC Gly	TGG Trp	CCT Pro	TGG Trp -20	GAG Glu	GAG Glu	CGG Arg	CAG Gln	GGG Gly -15	CAT His	106
CAC His	CTC Leu	CTT Leu	CTG Leu -10	CTG Leu	CTT Leu	CTC Leu	CCT Pro	GCT Ala -5	CCT Pro	ACC Thr	CTC Leu	AAG Lys	GGC Gly 1	CTG Leu	GGG Gly	154
GCT Ala	GCC Ala 5	CAG Gln	CTG Leu	CCT Pro	CTA Leu	TGC Cys 10	CCT Pro	TCT Ser	GGG Gly	GGT Gly	CTC Leu 15	AGC Ser	CCA Pro	CTG Leu	CTG Leu	202
			CAA Gln													220

(2) INFORMATION FOR SEQ ID NO: 259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 56..429
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98 region 65..438

id W27019

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(79..429)

WO 99/06554 PCT/IB98/01238

(C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 99 region 91..441 id W26783 (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 284..390 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 92 region 343..449 id W85233 est (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 57..281 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 7.2 seq LLFIIGLIGCCAT/IR (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 259: ACTCTCGGTG AGCGCRSCCC GCTCTCCGGG CCGGGTCTTC GCGGGCCACC GGCGCC ATG -75 GGC CAG TGC GGC ATC ACC TCC TCC AAG ACC GTG CTG GTC TTT CTC AAC Gly Gln Cys Gly Ile Thr Ser Ser Lys Thr Val Leu Val Phe Leu Asn -70 CTC ATC TTC TGG GGG GCA GCT GGC ATT TTA TGC TAT GTG GGA GCC TAT 155 Leu Ile Phe Trp Gly Ala Ala Gly Ile Leu Cys Tyr Val Gly Ala Tyr -55 GTC TTC ATC ACT TAT GAT GAC TAT GAC CAC TTC TTT GAA GAT GTG TAC 203 Val Phe Ile Thr Tyr Asp Asp Tyr Asp His Phe Phe Glu Asp Val Tyr -40 -35 ACG CTC ATC CCT GCT GTA GTG ATC ATA GCT GTA AGA GCC CTG CTT TTC Thr Leu Ile Pro Ala Val Val Ile Ile Ala Val Arg Ala Leu Leu Phe ATC ATT GGG CTA ATT GGC TGC TGT GCC ACA ATC CGG GAA AGT CGC TGT 299 Ile Ile Gly Leu Ile Gly Cys Cys Ala Thr Ile Arg Glu Ser Arg Cys GGA CTT GCC ACG TTT GTC ATC ATC CTG CTC TTG GTT TTT GTC ACA GAA 347 Gly Leu Ala Thr Phe Val Ile Ile Leu Leu Leu Val Phe Val Thr Glu 10 15 GTT GTT GTA GTG GTT TTG GGA TAT GTT TAC AGA GCA AAG GTG GAA AAT Val Val Val Val Leu Gly Tyr Val Tyr Arg Ala Lys Val Glu Asn

428

25

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GAG GTT GAT CGC AGC ATT CAG AAA GTG TAT AAG

Glu Val Asp Arg Ser Ile Gln Lys Val Tyr Lys

(2) INFORMATION FOR SEQ ID NO: 260;

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 167..425
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 106..364

id N39913

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 63..170
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..108

id N39913

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 61..188
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 39..166

id HUM527C01B

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 188..303
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 165..280

id HUM527C01B

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 24..61
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100 region 1..38

id HUM527C01B

WO 99/06554 PCT/IB98/01238

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(ix)	FEAT	URE:	
	(A)	NAME/KEY:	sig_peptide
		LOCATION:	
	(C)	TOFNTTFTC	ATTON METHOD

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 7

seq IGHFLCLVILVYC/AE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 260:

AAG	AGGA'	TTT (GGCG	CCCT	CC T	CTGT	GGAT'	r cr	GGCC	AGGC	CGG	GTTC	GGC (GGTT(GCTGT	G 60
AGA	GCGG	GCT '	rccci	AACA(Me	rg Co et Pr 65	CG K(CC G aa A	CC T la Pl	ne Se	CT G er Va	TC AG	GC TO	CT T' er Pl	TC CCC he Pro	>
GTC Val	AGC Ser	ATC Ile	CCA Pro	GCC Ala -50	GTG Val	CTC Leu	ACG Thr	CAG Gln	ACG Thr -45	GAC Asp	TGG Trp	ACT Thr	GAG Glu	CCC Pro -40	TGG Trp	161
CTC Leu	ATG Met	GGG Gly	CTG Leu -35	GCC Ala	ACC Thr	TTC Phe	CAC His	GCG Ala -30	CTC Leu	TGC Cys	GTG Val	CTC Leu	CTC Leu -25	ACC Thr	TGC Cys	209
TTG Leu	TCC Ser	TCC Ser -20	CGA Arg	AGC Ser	TAC Tyr	AGA Arg	CTA Leu -15	CAG Gln	ATC Ile	GGG G1y	CAC His	TTT Phe -10	CTG Leu	TGT Cys	CTA Leu	257
GTC Val	ATC Ile -5	TTA Leu	GTC Val	TAC Tyr	TGT Cys	GCT Ala l	GAA Glu	TAC Tyr	ATC Ile	AAT Asn 5	GAG Glu	GCG Ala	GCT Ala	GCG Ala	ATG Met 10	305
AAC Asn	TGG Trp	AGA Arg	TTA Leu	TTT Phe 15	TCG Ser	MAA Xaa	TAC Tyr	CAG Gln	TAT Tyr 20	TTC Phe	GAC Asp	TCC Ser	AGG Arg	GGG G1y 25	ATG Met	353
TTC Phe	ATT Ile	TCT Ser	ATA Ile 30	GTA Val	TTT Phe	TCA Ser	GCC Ala	CCA Pro 35	CTG Leu	CTG Leu	GTG Val	AAT Asn	GCC Ala 40	ATG Met	ATC Ile	401
	GTG Val															425

(2) INFORMATION FOR SEQ ID NO: 261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix)	FEATURE:
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(A) NAME/KEY: other

(B) LOCATION: 133..165

- (C) I-DENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 11..43 id HUM153A05B

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide
(B) LOCATION: 136..177

- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.7

seq LLLSLFFPLRISL/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 261:

ATTTTTCTCC GGTACAGCCT GGGAACGTAG GTCCCGCGCC TGTGATAAGT AAGGTTGGAT 60

TTTCTCTTCC CTGAGGTGAA GGATGCCCGG RAGSCCTCGG CAGGACCGCG CGGAAACGGG 120

CCTTCTGCCC AAAAG ATG CTG CTT CTC TCC TTA TTC TTT CCC CTC AGA ATC 171

Met Leu Leu Ser Leu Phe Phe Pro Leu Arg Ile
-10 -5

TCG CTG TCT CCT TCC AAC CAC CTG TGG TCG GCA TCC TCC GGG

Ser Leu Ser Pro Ser Asn His Leu Trp Ser Ala Ser Ser Gly

1 5 10

(2) INFORMATION FOR SEQ ID NO: 262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 16..319
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98 region 1..304 id HSC26A021

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 17..174

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 1..158 id W07871

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 205..319
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 192..306

id W07871

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 174..203
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 159..188

id W07871

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 169..305
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 144..280

id T75539

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 64..172
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 41..149

id T75539

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 175..319
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 161..305

id H94774

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 24..165
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 10..151

id H94774

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 228..319(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 93

region 203..294

id W89738

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 43..102

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 91

region 22..81 id W89738

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide(B) LOCATION: 82..150

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 6.6

seq LILVLQLLLRIRR/NR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 262:

ACTCGCACCC GGAAC	CAACAA AGCAAG	GAAG ACGGAGTCC	G AGCCTCGGGG G	CTCCTAGCA 60
ACGGGCCGGG GCGGC	GAGTTC C ATG (Met (GAG ACT GGG GA Glu Thr Gly Gl -20	u Arg Ala Arg 1	CTC ATC 111 Leu Ile -15
CTC ATC CTT GTC Leu Ile Leu Val -10	CTC CAG CTT (Leu Gln Leu)	CTC CTT CGC ATC Leu Leu Arg Ilo -5	C CGA CGC AAC (e Arg Arg Asn A 1	CGG CAG 159 Arg Gln
CAG CGC TGC SCC Gln Arg Cys Xaa 5	GCG TCC TCA (Ala Ser Ser 1	GCC ACC GCT CCC Ala Thr Ala Pro	C TCT TCC CAC C C Ser Ser His C 15	GGA TGT 207 Gly Cys
GAT CTT CGT GGT Asp Leu Arg Gly 20	GGA AAG CTA A Gly Lys Leu A 25	AAT TTT AAA AC Asn Phe Lys Th	Thr Pro Met A	GAT GCA 255 Asp Ala 35
GAC AGT GAT GTT Asp Ser Asp Val	GCA TTG GAC A Ala Leu Asp 1 40	ATT CTA ATT ACA Ile Leu Ile Tha 45	A AAT GTA GTC T C Asn Val Val C	IGT GTT 303 Cys Val 50
TTT AGA ACA AGA Phe Arg Thr Arg 55				321

(2) INFORMATION FOR SEQ ID NO: 263:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 325 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

PCT/IB98/01238 WO 99/06554 246 (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 2..88 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 96 region 18..104 id R56970 est (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 128..250 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 6.4 seq ILGCSSVCQLCTG/RQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 263:

AGGAGTTAAG AAATGTCGTT CTTCAGATTT AAAAAGAAAA CCTTTACTGA ATCAGCTGAG 60 TGTTAATAAT ACGAATTTCC TTKTCNTGCC AATKCDRMYC TGRDDCAGRA RATCSNWGAA 120 CAGGGWT ATG TGT GGA TTW YAG TTT TCT CTG CCT TGC CTA CGA CTG TTT Met Cys Gly Xaa Xaa Phe Ser Leu Pro Cys Leu Arg Leu Phe -40 CTG GTT GTT ACC TGT TAT CKT TTA TTA TTA CTC CAC AAA GAA ATA CTT Leu Val Val Thr Cys Tyr Xaa Leu Leu Leu Leu His Lys Glu Ile Leu -25 -20 -15 GGA TGT TCG TCT GTT TGT CAG CTC TGC ACT GGG AGA CAA ATT AAC TGC 265 Gly Cys Ser Ser Val Cys Gln Leu Cys Thr Gly Arg Gln Ile Asn Cys -10 CGT AAC TTA GGC CTT TCG AGT ATT CTA AGA ATT TTC CTG AAA GTA CAG 313 Arg Asn Leu Gly Leu Ser Ser Ile Leu Arg Ile Phe Leu Lys Val Gln 10 TTT TTC TGT ATC 325 Phe Phe Cys Ile

(2) INFORMATION FOR SEQ ID NO: 264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

247

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) @RGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 140..316
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 176..352

id W42809

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 14..129
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 50..165

id W42809

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 140..242
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 116..218

id N99674

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 58..129
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 34..105

id N99674

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 243..285
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 218..260

id N99674

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 27..57
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 2..32

id N99674 est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 140..272
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 78..210

id R20073

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 267..364
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 206..303

id R20073

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 63..129
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..67 id R20073

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 35..139
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..105

id N99685

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 140..242
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 105..207

id N99685

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 286..316
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 251..281

id N99685

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 6..139
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98 region 1..134

249

id AA154228 est

(ix) FE	ATU	RE:
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(A) NAME/KEY: other
(B) LOCATION: 140..206

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 134..200 id AA154228

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 10..228

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 6.4

seq ACCFLSAFSPTLT/KS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 264:

ATAATAAAA ATG A Met A	AC CCC GTT ACA G sn Pro Val Thr G -70	AG TCA CCA TCA TC lu Ser Pro Ser C -65	GT CTC TTC TCA CCA 51 ys Leu Phe Ser Pro -60
		CAA CTA GCC CTT Gln Leu Ala Leu -50	
		GCT GGT GTC GKT Ala Gly Val Xaa -35	
		CCG CCC TTT GGT Pro Pro Phe Gly	
		ACC TTA ACC AAA Thr Leu Thr Lys 1	
ACC TCG ACC GCC Thr Ser Thr Ala	CAC ACA TTC CTG His Thr Phe Leu 10	GCC AAT CAG CTC Ala Asn Gln Leu 15	AGC TGT TTA TTT 291 Ser Cys Leu Phe 20
ACC AAA TGT CTT Thr Lys Cys Leu 25	CAC AAC AAC TAC His Asn Asn Tyr	AGC AGC AGC CTT Ser Ser Ser Leu 30	CGG CTA ACA AAA 339 Arg Leu Thr Lys 35
	TCC ACA ACA CCC Ser Thr Thr Pro		366

(2) INFORMATION FOR SEQ ID NO: 265:

40

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 114 base pairs

45

(B) TYPE: NUCLEIC ACID

WO 99/06554 PCT/IB98/01238

> (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Dystrophic muscle

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 2..86
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 8..92 id AA070287

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 15..80
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..66 id T10748

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 22..88
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 17..83 id N67981

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 21..85
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 17..81 id AA069568

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 25..87
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.3

seq LGLSVLLTAATVA/GV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 265:

AAGGCCGCGG CCGCCAGCGT GGGG ATG TCT AGG AGC TCG AAG GTG GTG CTG 51 Met Ser Arg Ser Ser Lys Val Val Leu -20 -15

GGC CTC TCG GTG CTG CTG ACG GCC GCC ACA GTG GCC GGC GTA CAT GTG 99 Gly Leu Ser Val Leu Leu Thr Ala Ala Thr Val Ala Gly Val His Val

-10

- 5

1

AAG CAG CAG TGG GAC Lys Gln Gln Trp Asp

114

(2) INFORMATION FOR SEQ ID NO: 266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 1..197
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 8..204

id H10448

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 5..197
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..193

id AA127134

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 5..197
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..193

id HUML13653

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 1..197
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 9..205

id HSC18H071

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 34..197

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 96
region 13..176
id AA194682

est

(ix.	FEATURE	:
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- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 31..108
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.3

seq GVGLVTLLGLAVG/SY

204

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 266:

GTCAGGTGGT GGAGGAAAAG GCGCTCCGTC ATG GGG ATC CAG ACG AGC CCC GTC Met Gly Ile Gln Thr Ser Pro Val -25 -20 CTG CTG GCC TCC CTG GGG GTG GGG CTG GTC ACT CTG CTC GGC CTG GCT 102 Leu Leu Ala Ser Leu Gly Val Gly Leu Val Thr Leu Leu Gly Leu Ala -15 GTG GGC TCC TAC TTG GTT CGG AGG TCC CGC CGG CCT CAG GTC ACT CTC 150 Val Gly Ser Tyr Leu Val Arg Arg Ser Arg Pro Gln Val Thr Leu 5 CTG GAC CCC AGT GAA AAG TAC CTG CTA CGA CTG CTA GAC AAG ACG ACC 198 Leu Asp Pro Ser Glu Lys Tyr Leu Leu Arg Leu Leu Asp Lys Thr Thr 20 25 CCC GGG

(2) INFORMATION FOR SEQ ID NO: 267:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 340 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:

Pro Gly

- (A) NAME/KEY: other
- (B) LOCATION: 33..227
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 1..195

id W00881

est

(ix) FEATURE:

WO 99/06554

- (A) NAME/KEY: sig_peptide
 (B) LOCATION: 167..319
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.2

seq VLLLSSAXLVXXS/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 267:

CATTTGCTCT TCTCTTAACT CCTACCTGAA AACCCCATTC CTAAATTATT CACTATATTT 60 CAGACTTCTT CACTCTTCTC CMAAAACCTG AATCAGCTTG TGCTGATTTT TTCCTATCTG 120 CTATCCCTAA AAGGACTAGA CCTTCTTTCT ATCCTTACTC CCCTCA ATG TAT CCA Met Tyr Pro -50 TCT TAC CTC TTG ATT KKS CCT CCC ATT CCC TCA CAG TTC CTG AAA CAG 223 Ser Tyr Leu Leu Ile Xaa Pro Pro Ile Pro Ser Gln Phe Leu Lys Gln -40 TGC SCC CCC CCG ACC CTA AGC GAC CCC TTT CTG CCC CTG GCC TTG AGG 271 Cys Xaa Pro Pro Thr Leu Ser Asp Pro Phe Leu Pro Leu Ala Leu Arg -30 -25 TCC CTT GAC GTG CTG CTC CTG TCT TCT GCT CNB YTA GTB VVC NAT TCC Ser Leu Asp Val Leu Leu Ser Ser Ala Xaa Leu Val Xaa Xaa Ser -15 TCT CCC TTG GAA TTC ATC AGA 340 Ser Pro Leu Glu Phe Ile Arg 1

(2) INFORMATION FOR SEQ ID NO: 268:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 368 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 253..332
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 90

region 159..238 id AA114672

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide

WO 99/06554 PCT/IB98/01238 254

- (B) LOCATION: 195..293
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.2 seq ILLLXTFQTWCLR/IS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 268:

AGGGGTACCT (GTCGTCATG G	CAGGCGGTA	TTGACCGAAG	AGCTTGRTGA GGAAGA	GCAG 60
CTGCTGAGAA (GGCATCGCAA A	KAGAAGAAG	GAGTTGCAAS	CCAAAATTCA GGGCAT	GAAG 120
AATGCTGTTC C	CCAAGAATGA C	AATGAAGAG	GDAGGARGCA	GCTCACCGRA GATGTG	GCCA 180
AGTTGGAAAA A	AGAW ATG GAA Met Glu	CAG AAA C Gln Lys H -30	AY AGA GAS is Arg Xaa	GAA CTG GAG CAA T Glu Leu Glu Gln L -25	TG 230 eu
AAG CTG RCT Lys Leu Xaa -20	ACT AAG GAG Thr Lys Glu	AAT AAG A Asn Lys I -15	le Leu Leu	CTG YWA ACA TTT C Leu Xaa Thr Phe G -10	AA 278 ln
ACT TGG TGC Thr Trp Cys -5	TTG AGA ATC Leu Arg Ile 1	AGC CAC C Ser His L	TC GGA TAT eu Gly Tyr	CAR AAG CAC AWA A Gln Lys His Xaa A 10	GA 326 rg
GRC GGG TGC Xaa Gly Cys	CTG GAT MSA Leu Asp Xaa 15	Arg Ser S	CT CTG TGT er Leu Cys 20	TGT CCT TGG Cys Pro Trp 25	368

(2) INFORMATION FOR SEQ ID NO: 269:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 398 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (3) LOCATION: complement(1..43)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 90 region 209..251

id AA013573

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(1..43)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 153..195 id AA014924 est

(ix) FEATUR

(A) NAME/KEY: sig_peptide

(B) LOCATION: 54..122

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5.9

seq TLKFLTLLQKSNA/KR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 269:

AGA	CGAA	GCT (CGAT	GAAG	AT T'	raga	GAGT	r cc	AGTG	AATC	CGA!	rgtg	AGT (ATG Met	56
						GCA Ala										104
						AAA Lys l										152
GAA Glu	CTT Leu	TGG Trp	TAC Tyr	AAC Asn 15	GAT Asp	CCA Pro	GGC Gly	CAG Gln	ATG Met 20	AAT Asn	GAT Asp	GGA Gly	CCA Pro	CTC Leu 25	TGC Cys	200
						AGA Arg										248
CCT Pro	GGA Gly	GAA Glu 45	GAG Glu	GCC Ala	ATC Ile	AAG Lys	CCC Pro 50	TGT Cys	CGT Arg	CCT Pro	ATG Met	ACC Thr 55	AAC Asn	AAT Asn	GCT Ala	296
GGC Gly	AGA Arg 60	CTT Leu	TTC Phe	CAC His	TAC Tyr	CGG Arg 65	ATC Ile	ACA Thr	GTM Val	TCC Ser	CCG Pro 70	CCT Pro	ACG Thr	AAC Asn	TTT Phe	344
TTA Leu 75	ACT Thr	GAC Asp	AGG Arg	CCA Pro	ACT Thr 80	GTT Val	ATA Ile	GAA Glu	TAC Tyr	GAT Asp 85	GAT Asp	CAC His	GAG Glu	TAT Tyr	ATC Ile 90	392
	GAA Glu															398

(2) INFORMATION FOR SEQ ID NO: 270:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 359 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:

PCT/IB98/01238

- (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 105..208
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 81..184

id N51797

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 30..110
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 7..87

id N51797

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 54..134
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.9

seq ALALAXAPDLAQA/PL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 270:

AGTGCAGAAG GTTC	TGGGAA GTAGGAGACC	CCACTGGCTT	TGGTCCCCTA AGA ATG	56
GAC TCT GCT GCC Asp Ser Ala Ala -25	TGT GCT GCT GCT C Cys Ala Ala Ala A -20	GCC ACC CCT Ala Thr Pro	GTT CCA GCC CTG GCT Val Pro Ala Leu Ala -15	104
TTG GCC HTA GCT Leu Ala Xaa Ala -10	CCA GAC CTA GCA (Pro Asp Leu Ala C	CAA GCC CCA Gln Ala Pro 1	CTG GCA CTC CCT GGC Leu Ala Leu Pro Gly 5	152
CTG TTA AGC CCA Leu Leu Ser Pro 10	TCT TGC CTT CTC T Ser Cys Leu Leu S	CCC TCT GGA Ser Ser Gly 15	CAA GAA GTA AAT GGG Gln Glu Val Asn Gly 20	200
AGT GAA AGA GGA Ser Glu Arg Gly 25	ACT TGT CTC TGG A Thr Cys Leu Trp A 30	AGG CCC TGG Arg Pro Trp	CTG TCT TCC ACA AAT Leu Ser Ser Thr Asn 35	248
GAC TCC CCA AGG Asp Ser Pro Arg 40	CAG ATG AGG AAG C Gln Met Arg Lys I 45	CTG GTG GAT Leu Val Asp	TTG GCT GCT GGT GGG Leu Ala Ala Gly Gly 50	296
GCA ACG GCT GCT Ala Thr Ala Ala 55	GAG GTC ACC AAG G Glu Val Thr Lys A 60	GCT GAA TCC Ala Glu Ser 65	ATR NTC CAT CAC CCT Xaa Xaa His His Pro 70	344
GTC AGG CTC TTC Val Arg Leu Phe				359

75

(2) INFORMATION FOR SEQ ID NO: 27:	(2)	INFORMATION	FOR	SEQ	ΙD	NO:	271
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(i)	SEQUENCE	CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 2..304
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 15..317

id T86266

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 64..135
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.7

seq ILGLLGTLVA/ML

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 271:

AAA	GAGC	TTC .	AGCC	TGAA	GA C	AAGG	GAGC	A GT	CCCT	GAAG	ACG	CTTC	TAC	TGAG	AGGTCT	60
GCC	ATG Met	GCC Ala	TCT Ser	CTT Leu	GGC Gly -20	CTC Leu	CAA Gln	CTT Leu	GTG Val	GGC Gly -15	TAC Tyr	ATC Ile	CTA Leu	GGC Gly	CTT Leu -10	108
CTG Leu	GGG Gly	CTT Leu	TTG Leu	GGS Gly -5	ACA Thr	CTG Leu	GTT Val	GCC Ala	ATG Met 1	CTG Leu	CTC Leu	CCC Pro	AGC Ser 5	TGG Trp	AAA Lys	156
ACA Thr	AGT Ser	TCT Ser 10	TAT Tyr	GTC Val	GGT Gly	GCC Ala	AGC Ser 15	ATT Ile	GTG Val	ACA Thr	GCA Ala	GTT Val 20	GGC Gly	TTC Phe	TCC Ser	204
AAG Lys	GGC Gly 25	CTC Leu	TGG Trp	ATG Met	GAA Glu	TGT Cys 30	GCC Ala	ACA Thr	YAC Xaa	AGC Ser	ACA Thr 35	GGC Gly	ATC Ile	ACC Thr	CAG Gln	252
TGT Cys 40	GAC Asp	ATC Ile	TAT Tyr	AGC Ser	ACC Thr 45	CTT Leu	CTG Leu	GGC Gly	CTG Leu	CCC Pro 50	GCT Ala	GAC Asp	ATC Ile	CAG Gln	GCT Ala 55	300
GCC	CAG	GCC	ATG	ATG	GTG	ACA	TCC	AGT	GCA	ATC	TCC	TCC	CTG	GCC	TGC	348

WO 99/06554

PCT/IB98/01238 258 Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys 60 ATT ATC TCT GTG GTG GGC ATG AGA TGC ACA GTC TTC TGC CAG GAA TCC 396 Ile Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser 80 CGA GCC AGG 405 Arg Ala Arg 90 (2) INFORMATION FOR SEQ ID NO: 272: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 324 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 98..326 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 15..243 id T86266 est (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 160..231 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 5.7 seg ILGLLGLLGTLVA/ML (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 272: AGCTGCTTGT GGCCACCCAC AGACACTTGT AAGGAGGAGA GAAGTCAGCC TGGCAGAGAG 60 ACTCTGAAAT GASSGATTAG AGGTGTTCAA GGRAGCAAAG AGCTTCAGCC TGAAGACAAG GGAGCAGTCC CTGAAGACGC TTCTACTGAG AGGTCTGCC ATG GCC TCT CTT GGC 174 Met Ala Ser Leu Gly -20 CTC CAA CTT GTG GGC TAC ATC CTA GGC CTT CTG GGG CTT TTG GGC ACA 222 Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu Gly Leu Leu Gly Thr

-5

270

-15

CTG GTT GCC ATG CTG CTC CCC AGC TGG AAA ACA AGT TCT TAT GTC GGT

Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr Ser Ser Tyr Val Gly

1 5 10

GCC AGC ATT GTG ACA GCA GTT GGC TTC TCC AAG GGC CTC TGG ATG GAA
Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys Gly Leu Trp Met Glu
15 20 25

TGT GCC
Cys Ala
30

(2) INFORMATION FOR SEQ ID NO: 273:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 397 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 95..260
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98 region 19..184 id AA132585

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 347..399
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 2..54

id N57441

est

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 272..325
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.6

seq LLCECLLLVAGYA/HD

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 273:

ACGCAGCCGT CAGCCGAACA ATTCGATGAC GAGGCCCAGG AAGCACGCTG AAACCCTGGG 60 CGGCGGCAAG CTGTGCGACC TCTTCTGCGG CCGGCCTGGA CTAGCTTTAT CGTCATCTGG 120 GAAATTGTTA AAAATGCAAA TTCGCAAGTT TGAGAGCCAT GGTTCCAAGA AACTGCATAA 130

PCT/IB98/01238 260 GCATACGAAA TAAGTTGCAG CCTCCCGWCT TATACCCTGG TACTTCTAGT CTAAAACAGG ATTTGACTCT ACTAATCCAG CCTTATACAG G.ATG CTG TGT TCT TTG CTC CTT 292 Met Leu Cys Ser Leu Leu Leu TGT GAA TGT CTG TTG CTG GTA GCT GGT TAT GCT CAT GAT GAC TGG 340 Cys Glu Cys Leu Leu Val Ala Gly Tyr Ala His Asp Asp Asp Trp -10 ATT GAC CCC ACA GAC ATG CTT AAC TAT GAT GCT GCT TCA GGA ACA ATG 388 Ile Asp Pro Thr Asp Met Leu Asn Tyr Asp Ala Ala Ser Gly Thr Met 10 15 AGA AAA TCT 397 Arg Lys Ser (2) INFORMATION FOR SEQ ID NO: 274: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 96 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal (F) TISSUE TYPE: kidney (ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 1..42 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 90 region 14..55 id H32593 (ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 22..87 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 5.5 seq LWYVCPCPSGAWM/VP (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 274: AGACGCTGCC CTTCCGCAGC G ATG GCA TCC CGG CTC TGT GGA GGG GCC CTC Met Ala Ser Arg Leu Cys Gly Gly Ala Leu -20 -15 TGG TAT GTG TGT CCC TGT CCT TCT GGG GCG TGG ATG GTK CCT GGG 96 Trp Tyr Val Cys Pro Cys Pro Ser Gly Ala Trp Met Val Pro Gly -10 -5



(2) INFORMATION FOR SEQ ID NO: 275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Muscle

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 19..254
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 15..250

id H23844

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 25..254
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 8..237 id AA036876

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 24..254
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 21..251

id H22656

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 35..217
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..183

id W05714

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 218..254
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 183..219

id W05714



(ix)	FEATURE:
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(A) NAME/KEY: other

(B) LOCATION: 34..244

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 99

region 1..211 id AA100765

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 69..152

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5.5

seq LGYLVLSEGAVLA/SS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 275:

ACGTGACCGG GGCCTGAAGC CGGAAGCTAC CTATCTGGTA GGGAGCTCCC CCAGCACCGA 60

AGACTGCG ATG ACT TCT GCA CTG ACC CAG GGG CTG GAG CGA ATC CCA GAC 110

Met Thr Ser Ala Leu Thr Gln Gly Leu Glu Arg Ile Pro Asp

-25

-20
-15

CAG CTC GGC TAC CTG GTA CTG AGT GAA GGT GCA GTG CTG GCG TCA TCT

158
Gln Leu Gly Tyr Leu Val Leu Ser Glu Gly Ala Val Leu Ala Ser Ser

-10

-5

1

GGG GAC CTG GAG AAT GAT GAG CAG GCA DCC AGT GCC ATC TCT GAG CTG

Gly Asp Leu Glu Asn Asp Glu Gln Ala Xaa Ser Ala Ile Ser Glu Leu

5 10 15

GTC AGC ACA GCC TGC GGT TTC CGG CTG CAC CGC GGC ATG AAT GTG CCC

Val Ser Thr Ala Cys Gly Phe Arg Leu His Arg Gly Met Asn Val Pro

20 25 30

AGG 257

Arg 35

(2) INFORMATION FOR SEQ ID NO: 276:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 254 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 9..243



> id H64050 est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 15..248
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 1..234

id R17172

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 14..248
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 1..235 id HSC15C081

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 22..248
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 1..227

id AA149663

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 43..248
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 29..234

id HSU46380

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 24..149
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.4

seq ITGVILLAVGIWG/KV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 276:

AGGTGCAGGG TCTCGGGCTA GTC ATG GCG TCC CCG TCT CGG AGA CTG CAG ACT 53

Met Ala Ser Pro Ser Arg Arg Leu Gln Thr

-40

-35

AAA CCA GTC ATT ACT TGT TTC AAG AGC GTT CTG CTA ATC KAC ACT NTK 101
Lys Pro Val Ile Thr Cys Phe Lys Ser Val Leu Leu Ile Xaa Thr Xaa
-30 -25 -20

ATT TKC TGG ATC ACT GGC GTK ATC CTT CTT GCA GTT GGC ATT TGG GGC

WO 99/06554 PCT/IB98/01238

Ile Xaa Trp Ile Thr Gly Val Ile Leu Leu Ala Val Gly Ile Trp Gly
-15 -5

AAG GTG AGC CTG GAG AAT TAC TTT KCK CTT TTA AAT GAG AAG GCC ACC
Lys Val Ser Leu Glu Asn Tyr Phe Xaa Leu Leu Asn Glu Lys Ala Thr
1 5 10 15

AAT GTC CCC TTC GKG CTC ATT GCT ACT GGT ACC GTC ATK ATT CTT TTG 245
Asn Val Pro Phe Xaa Leu Ile Ala Thr Gly Thr Val Xaa Ile Leu Leu 20 25 30

GGC TAC CGG
Gly Tyr Arg
35

(2) INFORMATION FOR SEQ ID NO: 277:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 231 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 1..228
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97 region 19..246 id HUMHG1206

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 1..222
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 1..222 id C15962

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 37..222
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95

region 35..220 id HUM417F07B

- (ix) FEATURE:
 - (A) NAME/KEY: other

(B) LOCATION: 2..33

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100 region 1..32 id HUM417F07B

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 59..228

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 18..187 id AA139623

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 94..178

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96 region 1..85 id N88476

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 177..228

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 94

region 82..133

id N88476

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 49...108

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 5.3

seq VLLGSGLTILSQP/LM

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 277:

GCG GCC AGT CAG GTG CTC CTG GGC TCC GGT CTC ACC ATC CTG TCC CAG
Ala Ala Ser Gln Val Leu Leu Gly Ser Gly Leu Thr Ile Leu Ser Gln
-15 -10 -5

CCG CTC ATG TAC GTG AAA GTG CTC ATC CAG GTG GGA TAT GAG CCT CTT

Pro Leu Met Tyr Val Lys Val Leu Ile Gln Val Gly Tyr Glu Pro Leu

1 5 10 15

CCT CCA ACA ATA GGA CGA AAT ATT TTT GGG CGG CAA GTG TGN YAG CTT
Pro Pro Thr Ile Gly Arg Asn Ile Phe Gly Arg Gln Val Xaa Xaa Leu
20 25 30

CCT NGT CTC TTT AGT TAT GCT CAG CAC GGG

Pro Xaa Leu Phe Ser Tyr Ala Gln His Gly
35 40

(2) INFORMATION FOR SEQ ID NO: 278:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 190 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement(2..185)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 93

region 93..276 id AA136898

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 43..89
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 93

region 30..76

id W96077

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 125..161
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 110..146

id W96077

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 83..119
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 94

region 69..105

id W96077

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 15..49
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 91 region 1..35

id W96077 est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 126..161
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 129..164

id N41630

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 58..89
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 63..94 id N41630

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 2..31
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 7..36 id N41630

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 38..161
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 19..142

id AA043148

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 121..185
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 61..125

id HUM430A04B

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 60..119
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..60 id HUM430A04B

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 98..157
- (C) IDENTIFICATION METHOD: Von Heijne matrix

•		
		PC7
	268	10

(D) OTHER INFORMATION: score 5.3

seq ALIFGGFISLIGA/AF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 278:

AACCTCTTCC GAGCGGGTC ACGGCCCGGC CGTCGGTAAC CTGGTTTCCG AGAGTGCCGG

GCGGTCGGCG GGTCAGGGCA GCCCGGGGCC TGACGCC ATG TCC CGG AAC CTG CGC 115

Met Ser Arg Asn Leu Arg -20

ACC GCG CTC ATT TTC GGC GGC TTC ATC TCC CTG ATC GGC GCC TTC 163 Thr Ala Leu Ile Phe Gly Gly Phe Ile Ser Leu Ile Gly Ala Ala Phe -10

TAT CCC ATC TAC TTC CGA CCC CAT GGG Tyr Pro Ile Tyr Phe Arg Pro His Gly 5 10

190

(2) INFORMATION FOR SEQ ID NO: 279:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 274 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement (97..229)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95

region 10..142

id H62783

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 80..218
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 94 region 54..192

id T71240

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 148..221
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98 region 356..429

60

id AA075451 est

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 80..140
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 288..348

id AA075451

est

(ix) FEATURE:

- (A) NAME/KEY: other
 (B) LOCATION: 135..222
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 350..437

id AA009954

est

(ix) FEATURE:

- (A) NAME/KEY: other (B) LOCATION: 105..140
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 319..354 id AA009954

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 148..216
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 384..452

id W15396

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 80..117
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 315..352

id W15396

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 206..256
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.1

seq LWCFHLVVLSLYS/SV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 279:

PCT/IB98/01238

ATGAAGAAGC AAGACGAAAA CACACAGGRA GGGAAAATCC TGGGATTCTT TTTCTAGGGA TGTAATACAT ATATTTACAA ATAAA ATG CCT CAT GGA CTC TGG TGC TTC CAC 232 Met Pro His Gly Leu Trp Cys Phe His -15 TTG GTC GTT TTG AGC CTT TAC AGC AGT GTA GCC ACA GCC CGG 274 Leu Val Val Leu Ser Leu Tyr Ser Ser Val Ala Thr Ala Arg -5 1

(2) INFORMATION FOR SEQ ID NO: 280:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 125 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement(2..124)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 104..226 id W94087

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 2..124
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 12..134

id R37206

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 2..124
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 19..141

id N42384

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement(2...92)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 96 region 177..267

id H84930 est

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- (A) NAME/KEY: other
- (B) LOCATION: complement(81..124)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 144..187

id H84930

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(2..124)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 148..270

id H82795

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 21..62
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5

seq SLVAVFLSCGLIS/KN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 280:

ATAAATTAGC AGTATTAGTT ATG AGT TTG GTT GCA GTG TTC TTA TCT TGT GGG 53 Met Ser Leu Val Ala Val Phe Leu Ser Cys Gly

CTG ATT TCC AAA AAC CAC ATG CTG CTG AAT TTA CCA GGG ATC CTC ATA Leu Ile Ser Lys Asn His Met Leu Leu Asn Leu Pro Gly Ile Leu Ile 1

CCT CAC AAT GCA AAC CAC TTA CTG Pro His Asn Ala Asn His Leu Leu 15

125

(2) INFORMATION FOR SEQ ID NO: 281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other

WO 99/06554 272

(B) LOCATION: 2..85

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 91

region 4..87 id HUML1521

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 85..120
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 86..121 id HUML1521

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 89..148
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 123..182

id W52706

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 34..84
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 69..119

id W52706

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (75..148)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 91

region 324..397

id AA132959

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 27..98
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5

seq GALAVGAVPVVLS/AM

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 281:

AAAGTTGNSA CCCGGACGGC CTCACC ATG ATG AAA CGG GCA GCT GCT GCA Met Met Lys Arg Ala Ala Ala Ala

-20

STG SGA GGA GCC CTG GCA GTG GGG GCT GTG CCC GTG GTG CTC AGT GCC

Val Gly Gly Ala Leu Ala Val Gly Ala Val Pro Val Val Leu Ser Ala

-15

-5

1

WO 99/06554 PCT/IB98/01238

ATG GGC TTC ACT GGG GCA GGA ATC GCC GCG TCC TCC ATA GCA GCC CAT Met Gly Phe Thr Gly Ala Gly Ile Ala Ala Ser Ser Ile Ala Ala His 5 10 15

GGG Gly 152

(2) INFORMATION FOR SEQ ID NO: 282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 232..430
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97 region 14..212 id H14129 est

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 19..261
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.9

seq LISFSWFANYIRA/GT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 282:

ATTGCCTTCA TTGCCGGC		GTG GAT AAA CCC Val Asp Lys Pro -75	
GAC ATG AAG AAA GTT Asp Met Lys Lys Val -70	TGG GAG GGA TAT Trp Glu Gly Tyr -65	CCCC ATA CAG AGC Pro Ile Gln Ser -60	ACT ATC CCT 99 Thr Ile Pro -55
TCC CAG TAT TGG TAC Ser Gln Tyr Trp Tyr -50	Tyr Met Ile Glu	A CTT TCC TTC TAC Leu Ser Phe Tyr -45	TGG TCC CTG 147 Trp Ser Leu -40
CTC TTC AGC ATT GCC Leu Phe Ser Ile Ala -35	TCT GAT GTC AAC Ser Asp Val Lys	Arg Lys Asp Phe	AAG GAA CAG 195 Lys Glu Gln -25
ATC ATC CAC CAT GTG Ile Ile His His Val	GCC ACC ATC ATT Ala Thr Ile Ile	CTC ATC AGC TTT	TCC TGG TTT 243 Ser Trp Phe

-20 -15 **-**10

AAG AAC ACC TGC AAC AAC ATC TTC ACC GTC TTC GCC ATT GTT TTT ATC
Lys Asn Thr Cys Asn Asn Ile Phe Thr Val Phe Ala Ile Val Phe Ile
30 35 40

ATC ACC CGA CTG GTC ATC CTG CCC TTC TGG ATC CTG CAT TGC

Ile Thr Arg Leu Val Ile Leu Pro Phe Trp Ile Leu His Cys

45

50

55

(2) INFORMATION FOR SEQ ID NO: 283:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 268 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 111..221
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97 region 37..147

id T82645

est

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: 35..82
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.8

seq SLFIYIFLTCSNT/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 283:

ATAGTATCTA TTGAAAAGGA AGCAGTGTGT ATCT ATG ATT ATA TCT CTG TTC ATC 55

Met Ile Ile Ser Leu Phe Ile
-15 -10

TAT ATA TIT TIG ACA TGT AGC AAC ACC TCT CCA TCT TAT CAA GGA ACT

Tyr Ile Phe Leu Thr Cys Ser Asn Thr Ser Pro Ser Tyr Gln Gly Thr

-5

1

5



CAA Gln	CTC Leu	GGT Gly 10	CTG Leu	GGT Gly	CTC Leu	CCC Pro	AGT Ser 15	GCC Ala	CAG Gln	TGG Trp	TGG Trp	CCT Pro 20	TTG Leu	ACA Thr	GGT Gly	151
AGG Arg	AGG Arg 25	ATG Met	CAG Gln	TGC Cys	TGC Cys	AGG Arg 30	CTA Leu	TTT Phe	TGT Cys	TTT Phe	TTG Leu 35	TTA Leu	CAA Gln	AAC Asn	TGT Cys	199
CTT Leu 40	TTC Phe	CCT Pro	TTT Phe	CCC Pro	CTC Leu 45	CAC His	CTG Leu	ATT Ile	CAG Gln	CAT His 50	GAT Asp	CCC Pro	TGT Cys	GAG Glu	CTG Leu 55	247
			ATC Ile													268

(2) INFORMATION FOR SEQ ID NO: 284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 9..250
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98 region 7..248 id HSC2OD111

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 122..257
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 1..136

id T77096

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 18..146
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95 region 19..147

id N32450



(ix) FEATU	RE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 9..104

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4.7

seq LQMLLGFVGRSKS/GL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 284:

AGACCAAG ATG GCG GCG GAG CTG GTG GAG GCC AAA AAC ATG GTG ATG A Met Ala Ala Glu Leu Val Glu Ala Lys Asn Met Val Met S -30 -25 -20	GT 50 er
TTT CGA GTC TCC GAC CTT CAG ATG CTC CTG GGT TTC GTG GGC CGG AGPhe Arg Val Ser Asp Leu Gln Met Leu Leu Gly Phe Val Gly Arg Ser -15 -10 -5	r 98
AAG AGT GGA CTG AAG CAC GAG CTC GTC ACC AGG GCC CTC CAG CTG GTC Lys Ser Gly Leu Lys His Glu Leu Val Thr Arg Ala Leu Gln Leu Val 1 5 10	G 146
CAG TTT GAC TGT AGC CCT GAG CTG TTC AAG AAG ATC AAG GAG CTG TAG Gln Phe Asp Cys Ser Pro Glu Leu Phe Lys Lys Ile Lys Glu Leu Ty: 15 20 25 30	:
GAG ACC CGC TAC GCC AAG AAG AAC TCG GAG CCT GCC CCA CAG CCG CAC Glu Thr Arg Tyr Ala Lys Lys Asn Ser Glu Pro Ala Pro Gln Pro His	242
CGG CCC CTG GAC CCC CTG ACC GGG Arg Pro Leu Asp Pro Leu Thr Gly 50	266

(2) INFORMATION FOR SEQ ID NO: 285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 10..105
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93 region 1..96 id R05622 est
- (ix) FEATURE:

			277	PC
١,	NAME /KEV.	مد ما شو		

- (A) NAME/KEY: other
- (B) LOCATION: 24..92
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 2..70 id H94933

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 64..243
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.7

seq VHALCPLSPLVTT/GC

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 285:

AAC	AACTCTCCAA AAAGCAGAGA CAGCAGGAAG AGGGGAGTGO										AGGCAGCCCA TTCACCTGGG				60	
GAA	ATG Met -60	ACT Thr	GGG Gly	TTG Leu	TCG Ser	ATG Met -55	GMC Xaa	GGT Gly	GGC Gly	GGB Gly	AGC Ser -50	Xaa	AMG Xaa	GGG Gly	GAY Asp	108
GTG Val -45	GAS Xaa	CCG Pro	TDC Xaa	TAC Tyr	TAT Tyr -40	GGT Gly	AAR Lys	CVT Xaa	GGG Gly	CCC Pro -35	CTG Leu	CGC Arg	RCC Xaa	CTT Leu	CCT Pro -30	156
GAG Glu	CCC Pro	TCA Ser	GGA Gly	CCC Pro -25	CTT Leu	CCA Pro	CCA Pro	AGC Ser	AGC Ser -20	GGC Gly	CTC Leu	TCC Ser	CAG Gln	CCC Pro -15	CAG Gln	204
GTC Val	CAT His	GCT Ala	CTG Leu -10	TGC Cys	CCC Pro	TTA Leu	TCT Ser	CCC Pro -5	CTG Leu	GTT Val	ACC Thr	ACG Thr	GGC Gly 1	TGC Cys	TGC Cys	252
	CAG Gln 5															264

(2) INFORMATION FOR SEQ ID NO: 286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 157..269
- (C) IDENTIFICATION METHOD: blastn



(D) OTHER INFORMATION: identity 97

region 95..207

. id N41379

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 62..173
- (C) IDENTIFICATION METHOD: blastn
 (D) OTHER INFORMATION: identity 90

region 1..112 id N41379

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 275..319
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 213..257 id N41379

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 8..173
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 1..166 id AA044371

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 157..219
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 149..211

id AA044371

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (272..319)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 93

region 423..470

id N30852

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (225..264)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 478..517

id N30852

est

(ix) FEATURE:

(A) NAME/KEY: other



(B)	LOCATION: complement(320349)
	IDENTIFICATION METHOD: blastn
	OTHER INFORMATION: identity 96
	region 394423
	id N30852
	est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: complement(238..271)

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 94

region 481..514 id AA044232

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 303..349

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 5..51 id R78468

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 367..459
- (C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4.6

seq GLLGXGLXXXSLT/AG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 286:

AAAGTCCTAG AGGGGGTCGG GGTMTGGGTG GACAAGCTTT CCTCGTCCTC TCCCNACAGA	60
GCTGACGTGT CCTGGGTTCC ACCGGGAGCG GGCATTTCCA CCGGACGGGA GGGTTCGGGG	120
TGTCCGGGGC TGGGGAATAC GTARGGGKTG CSGCGCCGGT GTGGGAAGTT GGGGCGTGTG	180
GCTGCAGTCC CGGGAGTTCT TGGAGGGGGT CGGCCCACCG AGCTTCCGGA CCGGCTGATC	240
TGCCCGTAGC TTGCCGGAGG GAGGGCGGAG CTGACTCTCC GTCCCTTCTC CCATCCCCTC	300
SAGTGGTGGG TACGGGCACC TCGCTGGCGC TCTCCTCCCT CCTGTCCCTN GNNSNTCTTT	360
GCTGGG ATG CAG ATG TAC AGC CGT CAG CTG GCC TCC AMC GAG TGG CTC Met Gln Met Tyr Ser Arg Gln Leu Ala Ser Xaa Glu Trp Leu -30 -25 -20	408
ACC ATC CAG GGC GGC CTG CTT GGW KCG GGT CTC TTS KRG TYC TCG CTC Thr Ile Gln Gly Gly Leu Leu Gly Xaa Gly Leu Xaa Xaa Xaa Ser Leu -15 -5	456
ACT GCG GGG Thr Ala Gly	465



(2) INFORMATION FOR SEQ ID NO: 287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 63..344
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 56..337 id AA203498

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 7..65
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..59

id AA203498

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 344..385
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 338..379

id AA203498

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 63..292
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 44..273

id W87295

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 292..344
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 92

region 274..326

id W87295

est

(ix) FEATURE:



- (A) NAME/KEY: other(B) LOCATION: 20..65
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 2..47 id W87295 est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 344..385
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 327..368

id W87295

est

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 33..344
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 1..312 id AA248429

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 344..385
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 313..354

id AA248429

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 76..344
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 1..269

id W01758

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 344..385
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 270..311

id W01758

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 63..234
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97 region 30..201

1 DD 240 CO 2

id AA249697

WO 99/06554 PCT/IB98/01238 282

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 33..65

(C) FDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100

region 1..33

id AA249697

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 257..289

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 222..254 id AA249697

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 227..256

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 193..222 id AA249697

(ix) FEATURE:

(A) NAME/KEY: sig_peptide (B) LOCATION: 19..180

(C) IDENTIFICATION METHOD: Von Heijne matrix

ATCTGGCTCA GTTCCGCC ATG GCC TCC TTG GAA GTC AGT CGT AGT CCT CGC

(D) OTHER INFORMATION: score 4.3

seq LIVWLLVKSFSES/GI

51

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 287:

					Met	Ala	Ser	Leu	Glu -50	Val		Arg	Ser	Pro -45	Arg	
AGG Arg	TCT Ser	CGG Arg	CGG Arg -40	GAG Glu	CTG Leu	GAA Glu	Val	CGC Arg -35	Ser	CCA Pro	CGA Arg	CAG Gln	AAC Asn -30	AAA Lys	TAT Tyr	99
TCG Ser	GTG Val	CTT Leu -25	TTA Leu	CCT Pro	ACC Thr	TAC Tyr	AAC Asn -20	GAG Glu	CGC Arg	GAG Glu	AAC Asn	CTG Leu -15	CCG Pro	CTC Leu	ATC Ile	147
GTG Val	TGG Trp	Leu	Leu	Val	AAA Lys	Ser	Phe	Ser	GAG Glu	Ser	Gly	Ile	Asn	Tyr	Glu	195

ATT ATA ATC ATA GAT GAT GGA AGC CCA GAT GGA ACA AGG GAT GTT GCT Tie Ile Ile Asp Asp Gly Ser Pro Asp Gly Thr Arg Asp Val Ala 10

GAA CAG TTG GAG AAG ATC TAT GGG TCA GAC AGA ATT CTT CTA AGA CCA Glu Gln Leu Glu Lys Ile Tyr Gly Ser Asp Arg Ile Leu Leu Arg Pro 25

283

PCT/IB98/01238

CGA GAG AAA AAG TTG GGA CTA GGA ACT GCA TAT ATT CDY SRA ATG AAA Arg Glu Lys Lys Leu Gly Leu Gly Thr Ala Tyr Ile Xaa Xaa Met Lys 339 45 CAT GCA CAG GAA ACT ACA TCA TTA TTA TGG ATS CTG ATC TCT CAC His Ala Gln Glu Thr Thr Ser Leu Leu Trp Xaa Leu Ile Ser His 384 60

(2) INFORMATION FOR SEQ ID NO: 288:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 332 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 36..268
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 13..245 id AA134651

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 266..303
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 244..281

id AA134651

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 14..272
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 95..353

id W26888

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 61..262
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 99

region 7..208

id T66207



(ix	}	FEATURE:	
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(A) NAME/KEY: other

(B) LOCATION: 263..325.

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 208..270

id T66207 est

284

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 39..267

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 1..229 id W00383

est.

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 35..304

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 13..282 id HSC36A071

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 207..266

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4.3

seq LLDSSLMASGTAS/RS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 288:

AAACCGGGKG TAGACGTACC TCACGGAAGC CGGCTTTGGC CCTGCGGCTK YTACCGTCGC 60 CGCGGAGAAA TTGTTGGATC TGGCAGTCTA GGAATGAATC TCCTCTCAGC CTTTAAGCTC ACCTGGTCAG AATCCTTGGA TGAGCCTGTG GGACCGTTCC TCCTAGCCCG GTGGTTTGGA 180 ACCAGTGGCT TTGGGACTGT AAGAGG ATG GAC AAA GAT TCT CAG GGG CTG CTA 233 Met Asp Lys Asp Ser Gln Gly Leu Leu -20 -15 GAT TCA TCC CTG ATG GCA TCA GGC ACT GCC AGC CGC TCA GAG GAT GAG 281 Asp Ser Ser Leu Met Ala Ser Gly Thr Ala Ser Arg Ser Glu Asp Glu -5 -10 GAG TCA CTG GCA GGG CAG AAG CGA GCC TCC TCC CAG GCC CTG GGC ACC Glu Ser Leu Ala Gly Gln Lys Arg Ala Ser Ser Gln Ala Leu Gly Thr 20 10 332 GGG Gly

(i)	SEQUENCE	CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 126..226
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95

region 38..138 id AA009514

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 252..343
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 161..252 id AA009514

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 102..131
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 93

region 15..44 id AA009514

est

- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: 100..207
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq CLAVSWEAAGCHG/AG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 289:

AAAGGAATAC TGACAGATAA GGCCGGAAAC AAAACTGATG GCTTGAAAAA CATTTTTATG 60

GAATGTATTT ACTATCATTT TGTTTTACTA TAGAGGTAG ATG GGA CTC TTA ACT

Met Gly Leu Leu Thr

-35

TTT GGG TAC ATT GAA AMC AKG CKG AAA ACT GAA CAC AAT CCT GAT CAT
Phe Gly Tyr Ile Glu Xaa Xaa Lys Thr Glu His Asn Pro Asp His

-30 -25 **-**2

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									20	0						
CAC His -15	TCC Ser	TGC Cys	CTG Leu	GCT Ala	GTC Val -10	TCC Ser	TGG Trp	GAG Glu	GCT Ala	GCC Ala -5	GGG Gly	TGC Cys	CAC His	GGA Gly	GCT Ala 1	210
GGG Gly	ACA Thr	CAG Gln	CAG Gln 5	AGC Ser	CCG Pro	CTA Leu	GGT Gly	GTT Val 10	GCA Ala	GGG Gly	CCC Pro	TGG Trp	AGG Arg 15	CCA Pro	AGG Arg	258
CCA Pro	CCC Pro	TGT Cys 20	GTG Val	GGG Gly	TCC Ser	CTG Leu	TTG Leu 25	GCA Ala	GCC Ala	AGG Arg	TCC Ser	CTA Leu 30	CAC His	AAA Lys	CAA Gln	306
GTA Val	ATC Ile 35	CTG Leu	TTT Phe	GGC Gly	CTC Leu	CTA Leu 40	GGT Gly	TTT Phe	GCA Ala	TAT Tyr	GAC Asp 45	CAC His	TGG Trp			348

(2) INFORMATION FOR SEQ ID NO: 290:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 206 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 73..208
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 53..188

id T06781

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 20..80
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 91

region 1..61

id T06781

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 16..105
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95

region 1..90

id AA101354

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide



(B) LOCATION: 1	.2.	.59
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- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.1 seq YAAVAGVLAGVES/RQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 290:

AGCGCGGGAA C ATG GGG CTG TAC GCT GCG GTG GCA GGC GTG CTG GCC GGC Met Gly Leu Tyr Ala Ala Val Ala Gly Val Leu Ala Gly -15GTG GAG AGC CGC CAG GGC TCT AAT CAA GGG GCT GGT GTA CTC CAG CAA 98 Val Glu Ser Arg Gln Gly Ser Asn Gln Gly Ala Gly Val Leu Gln Gln 1 CTT CCA GAA CGT GAA RCA GCT GTA CGC GCT GGT GTG CGA AAS GCA GCG 146 Leu Pro Glu Arg Glu Xaa Ala Val Arg Ala Gly Val Arg Xaa Ala Ala 15 CTA CTC CGC CGT GCT GGA TRC CGT GAT CTC CAR CGC CGG CCT CCT CAG Leu Leu Arg Arg Ala Gly Xaa Arg Asp Leu Gln Arg Arg Pro Pro Gln TGC GAA GAA GCT 206 Cys Glu Glu Ala

(2) INFORMATION FOR SEQ ID NO: 291:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 299 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 26..219
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 91 region 1..194

id T06781

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 204..234
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 93

region 176..206

id T06781

WO 99/06554 PCT/IB98/01238

(ix	FEATURE:

(A) NAME/KEY: other (B) LOCATION: 22..74

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 90 region 1..53 id AA101354

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 71..110

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 92 region 51..90 id AA101354

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 18..203

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 4.1

seq LDAVIASAGLLRA/EK

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 291:

AAAAGGCGCG CGGGAAC		GCT GCA GCT GCA G Ala Ala Ala Ala G -55	
GCC GGC GTG GAG AGG Ala Gly Val Glu Ser -50	C CGC CAG GGC TCT Arg Gln Gly Ser -45	ATC AAG GGG TTG Ile Lys Gly Leu -40	GTG TAC TCC 98 Val Tyr Ser
AGC AAC TTC CAG AAC Ser Asn Phe Gln Ass -35	C GTG AAG CAG CTG n Val Lys Gln Leu -30	TAC GCG CTG GTG Tyr Ala Leu Val -25	TGC GAA ACG 146 Cys Glu Thr -20
CAG CGC TAC TCC GCC Gln Arg Tyr Ser Ala -19	a Val Leu Asp Ala	GTG ATC GCC AGC Val Ile Ala Ser -10	GCC GGC CTC 194 Ala Gly Leu -5
CTC CGT GCG GAG AAG Leu Arg Ala Glu Ly: 1	G AAG CTG CGG CCG s Lys Leu Arg Pro 5	CAC CTG GCC AAG His Leu Ala Lys 10	GTG CTA GTG 242 Val Leu Val
TAT GAG TTG TTG TTC Tyr Glu Leu Leu Leu 15	G GGA AAG GGC TTT Gly Lys Gly Phe 20	CGA GGG GGT GGG Arg Gly Gly Gly 25	GGC CGA TGG 290 Gly Arg Trp
AAG GCC CGG Lys Ala Arg 30			299

(2) INFORMATION FOR SEQ ID NO: 292:

(i) SEQUENCE CHARACTERISTICS:

			(E	A) LE 3) TY C) SI O) TO	PE: RAND	NUCI EDNE	EIC SS:	ACID)							
		(ii)		ECUL												
		(vi)	(A (D	GINA) OR) DE	GANI VELO	SM: PMEN	Homo TAL	STAG	E: F	etal						
		(ix)	(A (B (C	TURE) NAI) LOG) IDI) OTI	ME/KI CATIO ENTII	ON: :	296. TION	.458 METI	ide reg	entii gion R500	ty 10)0 163				
		(ix)	(A) (B) (C)	TURE: NAM LOC IDE OTH	E/KE CATIC	N: c	compl	emer METH	IOD: ide reg	blas ntit ion AA01	stn :y 10	.487				
			(A) (B) (C) (D)	TURE: NAM LOC I DE OTH	E/KE ATIO NTIF ER I	N: 5 ICAT NFOR	19 ION MATI	6 METH ON:	OD: sco seq	re 4 WLL	.1 RLAY	LADI				
AGA	А АТ	G GG	T GC	T CA	G CA	C AC	A GC	ል ርፕ	ጥ ርጥ	ጥ ሮጥ	מת ת	m n.a	A GA	G GT	G AGG l Arg	; 49
					- 0	O				-5	5				-50	
-			9	GGT Gly -45	Lys	Val	Leu	vai	Arg -40	Leu	Phe	Glu	Leu	Arg -35	Arg	97
GAA Glu	CTT Leu	TTG Leu	GTT Val -30	TTC Phe	ATG Met	GAT Asp	TCT Ser	GCT Ala -25	TTT Phe	CGA Arg	CTA Leu	TCT Ser	GAT Asp -20	TGT Cys	TTA Leu	145
ACA Thr	AAT Asn	TCA Ser -15	TCT Ser	TGG Trp	CTG Leu	CTA Leu	AGA Arg -10	CTT Leu	GCA Ala	TAT Tyr	CTT Leu	GCA Ala -5	GAT Asp	ATT Ile	TTT Phe	193
ACT Thr	AAA Lys 1	TTA Leu	AAT Asn	GAA Glu	GTT Val 5	AAT Asn	TTG Leu	TCA Ser	ATG Met	CAA Gln 10	GGA Gly	AAA Lys	AAT Asn	GTG Val	ACC Thr	241

GTT TTT ACA GTA TTT GAT AAA ATG TCG TCA TTG TTA AGA AAA TTG GAA

239

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Val Phe Thr Val Phe Asp Lys Met Ser Ser Leu Leu Arg Lys Leu Glu 20 TTT TGG GCC TCA TCT GTA GAA GAA GAA AAC TTT GAT TGT TTT CCT ACA 337 Phe Trp Ala Ser Ser Val Glu Glu Asn Phe Asp Cys Phe Pro Thr 35 CTC AGT GAT TTT TTG ACT GAA ATT AAT TCT ACA GTT GAT AAA GAT ATT 385 Leu Ser Asp Phe Leu Thr Glu Ile Asn Ser Thr Val Asp Lys Asp Ile 50 55 TGC AGT GCC ATT GTG CAG CAC CTA AGG GGT TTG CGC GCT ACT CTG TTA 433 Cys Ser Ala Ile Val Gln His Leu Arg Gly Leu Arg Ala Thr Leu Leu AAA TAC TTT CCT GTA ACA AAT GAC 457 Lys Tyr Phe Pro Val Thr Asn Asp 80 85

(2) INFORMATION FOR SEQ ID NO: 293:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 248 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 60..247
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 95

region 19..206

id AA044042

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 70..247
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 6..183

id AA127902

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 88..247
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99 region 1..160 id AA056679

WO 99/065	291	PCT/IB98/01
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: complement(99247) (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 99 region 302450 id W93399 est	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: 90237 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 97 region 11158 id R29154 est	
(ix)	FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 117191 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 4 seq LVVMVPLVGLIHL/GW	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 293:	
AATCCGCGGC	AGAGCGGCTG CTTGAGATCT GTTTCTGGGG CCTCTGGCGG TGGCGGCC	TG 60
TGGCGGCCTG		ATG 119 Met ·25
AGC CTT CGG Ser Leu Arg	G AAC TTG TGG AGA GAC TAC AAA GTT TTG GTT GTT ATG GTG Asn Leu Trp Arg Asp Tyr Lys Val Leu Val Val Met Val -20 -15 -10	167
CCT TTA GTT Pro Leu Val	GGG CTC ATA CAT TTG GGG TGG TAC AGA ATC AAA AGC AGC Gly Leu Ile His Leu Gly Trp Tyr Arg Ile Lys Ser Ser -5	215
CCT CTT TTT		

CCT GTT TTC CAA ATA CCT AAA AAC GAC AAC ATG 248 Pro Val Phe Gln Ile Pro Lys Asn Asp Asn Met

(2) INFORMATION FOR SEQ ID NO: 294:

10

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs

15

- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Heart

WO 99/06554 PCT/IB98/01238 292

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 245..374

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 20..149

id T41381

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 75..227
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.9

seq GKLLQLVLGCAIS/CE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 294:

AAAAATAAAA TGTA	GGCAGC AAAAGTGGAA GAGGAG	SAGGC AGCTGGTGCA CTAATCCAGG 60
TCAGCAATCT GAAG		A GTA GAG TAC TCC CAG GAT 110 1 Val Glu Tyr Ser Gln Asp -45 -40
		CCTC CCA GAT GTG AGC CTC 158 Leu Pro Asp Val Ser Leu -25
ATT GGA GAG TTC Ile Gly Glu Phe -20	TCA GAC CCG GCA GAG CTC Ser Asp Pro Ala Glu Leu -15	GGC AAG CTG CTT CAG CTG 206 Gly Lys Leu Leu Gln Leu -10
		A AAG CAG GAC CAC ATC CAG 254 E Lys Gln Asp His Ile Gln 5
		G CAT GTG GTG ATG GAA GCC 302 His Val Val Met Glu Ala 20 25
ATC CAA GAG CTC Ile Gln Glu Leu	ATG ACC AAA GAC ACT CCT Met Thr Lys Asp Thr Pro 30	GAC TCC CTG TCA CCA GAG 350 Asp Ser Leu Ser Pro Glu 40
	TTT GAC AGC CAG TCC CGC Phe Asp Ser Gln Ser Arg 50	

(2) INFORMATION FOR SEQ ID NO: 295:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 405 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR

-WO 99/06554

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens(D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 241..406
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 105..270 id AA084830

est

293

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 200..229
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 64..93 id AA084830

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 241..406
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 66..231

id W01570

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 200..229
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 26..55

id W01570

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 296..406
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 1..111

id H82170

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 298..406
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 7..115

id N71014

WO 99/06554 PCT/IB98/01238 294

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А		Λ					\sim	_	

- (A) NAME/KEY: other
- (B) LOCATION: complement(147..201)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 238..292 id N35296

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 358..396
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.9

seq MIHGFCLAPTTSA/KN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 295:

ATGGGGGCGG ASTAGCCGGA GCCGCGAGTC CATTTTGGGG CTGTGCTTGG CGCGTACCGT 60 GCGGTCCCTG TAGTTGGAGG ACGGGCGGTC GCGCSGGCCT TTCCCACTAG CCGGAGGTCG 120 GAGATAAGTA CCCGCCGCCC GGCTTCTCTC GGGAAAGCGG GGTGGTCCTC GAACCTTCAG 180 CGAGGGTGGG GAGTTGCCCA GTAGCCTCTA GTTCGTTAGT CAAAACGTGA AAAAAAAAAGA 240 CCTGCTTTGC CVTGGGAAAT AGTAACCCTG CCAAATACAT CAGCTTGTAG GAGACAGAGG 300 ATGTGATGGA GCTGCTTGAA GAAGATCTCA CATGCCCTAT TTGTTGTAGT CTGTTTG 357 ATG ATC CAC GGG TTT TGC CTT GCT CCC ACA ACT TCT GCA AAA AAT GCT 405 Met Ile His Gly Phe Cys Leu Ala Pro Thr Thr Ser Ala Lys Asn Ala -10 -5

(2) INFORMATION FOR SEQ ID NO: 296:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 167 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 24..86
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95 region 1..63

id C16698

295

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(A) NAME/KEY: other

(B) LOCATION: 25..86

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 9..70 id H48377

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 38..86
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 36..84

id R17245

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 38..86
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 7..55

id H19182

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (19..54)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 91

region 181..216

id T12463

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 90..140
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.7

seq RTWCLACVEASPG/QP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 296:

AAGCCTGGGA CACCGCCGGC GGGGAGAGAA GCGGATCCCG TCCGAGCCCC GGCCCCAAGT 60

AACGCCGCCG CCCCGGAGCC GCCGTGAGT ATG CYT TGT CCC AGG ACC TGG TGT 113

Met Xaa Cys Pro Arg Thr Trp Cys

-15 -10

CTC GCC TGC GTT GAA GCA TCT CCA GGG CAG CCC TTC CTC CCG CCC CGC Leu Ala Cys Val Glu Ala Ser Pro Gly Gln Pro Phe Leu Pro Pro Arg

-5 1 5

CCC GGG Pro Gly



(2) INFORMATION FOR SEQ ID NO: 297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Dystrophic muscle

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 89..222
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 93..226

id W81645

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 26..90
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95

region 31..95

id W81645

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 89..222
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 62..195

id W06951

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 33..90
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 7..64

id W06951

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 45..222
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 2..179

id W38711

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

WO 99/06554 PCT/IB98/01238

- (B) LOCATION: 24..86
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.7 seg ETCALASHSGSSG/SK
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 297:

GCNGTCGGCT CCGCGGCGCC GCC ATG GCC GAC GTG GAA GAC GGA GAG GAA ACC 5:

Met Ala Asp Val Glu Asp Gly Glu Glu Thr

-20 -15

TGC GCC CTG GCC TCT CAC TCC GGG AGC TCA GGC TCC AAG TCG GGA GGC

Cys Ala Leu Ala Ser His Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly

-10

-5

1

5

GAC AAG ATG TTC TCC CTC AAG AAG TGG AAC GCG GTG GCC ATG TGG AGC

Asp Lys Met Phe Ser Leu Lys Lys Trp Asn Ala Val Ala Met Trp Ser

10 15 20

TGG GAC GTG GAG TGC GAT ACG TGC GCC ATC TGC AGG GTC CAG GTG ATG

Trp Asp Val Glu Cys Asp Thr Cys Ala Ile Cys Arg Val Gln Val Met

25 30 35

GAT GCC TGT MTT AGA TGT CAA GCG GGG
Asp Ala Cys Xaa Arg Cys Gln Ala Gly
40
45

(2) INFORMATION FOR SEQ ID NO: 298:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 356 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 122..188
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 198..264

id R58050

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement(122..188)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100 region 193..259 id H98670

356



	e s t	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: complement(122188) (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 194260 id N66980 est	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: complement(122188) (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 198264 id AA159781 est	
(ix)	FEATURE: (A) NAME/KEY: other (B) LOCATION: complement(122188) (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 region 161227 id H45410 est	
(ix)	FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 273350 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.7 seq IIMFLLIIVCGSP/RP	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO: 298:	
TAGAAGTAGC	AGGATCGCCT TAATAATAAT AATAGTTTTG TAGCATGAAG CCTGAGCATT	60
GTCCAAAGTT	TGGAAATGTG AACGCTGATA GTCACATCTG TCCATCTTTC CACATTTCTA	120
GGATGCTGAC	AGACAGCACC AAGAAGTAAT TGCAATTTAT CGGACACACC TTCTTAGTGC	180
TGCACAGGTA	AAGAACTACT TCTCCTTTGG AAAGAATATT GCTTTAGAGA TAATAATTTT	240
TATTTTCAAA	TAAATTTATG TGAAAGTAAT TG ATG TTT AAA GTA GCT GCA CCC Met Phe Lys Val Ala Ala Pro -25 -20	293
CCT ATG CTT	ATT TAW KAA ATA ATT ATG TTT CTT TTA ATC ATT GTT TGT	341

GGA TCT CCC AGG CCG Gly Ser Pro Arg Pro

-15

Pro Met Leu Ile Xaa Xaa Ile Ile Met Phe Leu Leu Ile Ile Val Cys

-10

WO 99/06554

PCT/IB98/01238

(2) INFORMATION FOR SEQ ID NO: 299:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 216 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement (87..181)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 228..322

id N29854 est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement(1..46)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 100

region 363..408

id N29854

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement (44..93)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 94

region 315..364

id N298**5**4

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement (87..181)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 67..161

id T32629

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: complement (1..93)
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 97

region 154..246

id T32629

- (ix) FEATURE:
 - (A) NAME/KEY: other



- (B) LOCATION: complement(87..181)(C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 230..324

id W61289

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(6..93)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 317..404

id W61289

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(87..181)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 232..326

id N53422

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(3..93)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 319..409

id N53422

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 87..181
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 78..172

id N50275

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 9..93
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 94

region 1..85

id N50275

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 64..126
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.6

seq FXMCLWSLRNLFS/RC

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 299:

WO 99/06554 301

AGCTATTTGG ATAGTGTAGC TTTAATGTGC TGCACATGAT ACTGGCAGCC CTAGAGTTCA 60 TAG ATG GAC TTT TGG GAC CCA GCA GTT TTT RAA ATG TGT TTA TGG AGT 108 Met Asp Phe Trp Asp Pro Ala Val Phe Xaa Met Cys Leu Trp Ser -20 -15 TTA AGA AAT TTA TTT TCC AGG TGC AGC CCC TGT CTA ACT GAA ATT TCT 156 Leu Arg Asn Leu Phe Ser Arg Cys Ser Pro Cys Leu Thr Glu Ile Ser -5 CTT CAC CTT GTA CAC TTG ACA GCT GAA AAA AAA CAA CAT GGG AGT AAT 204 Leu His Leu Val His Leu Thr Ala Glu Lys Lys Gln His Gly Ser Asn AAT GGG TCG GCG 216 Asn Gly Ser Ala 30

PCT/IB98/01238

(2) INFORMATION FOR SEQ ID NO: 300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: NUCLEIC ACID
- (C) STRANDEDNESS: DOUBLE
- (D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 9..122
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 97

region 1..114 id R56502

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 173..269
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 162..258

id R56502

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 129..172
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 95 region 119..162

id R56502

<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 160261 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.6</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 300:	
AGTGACCAAA TGACTTAACC ACAGATGGAG TGAAGACAGG GGTAACTGCT TGGTCTGGTC	60
CCCAGTAGAG CATTGCTCAC TATAAACCAC AAGCTGCTTC TAATTTATTT GAGRTGKTAW	120
TAAYCGTGGS CCTTKATATT CTGGTCTCTC TTGCTGCAA ATG AGT CCG GCA GGC Met Ser Pro Ala Gly -30	174
AAG CAC AAC TCA GAA AGC AAA TTC ACC TTC TTT GTA GCC CTT GAT GGG Lys His Asn Ser Glu Ser Lys Phe Thr Phe Phe Val Ala Leu Asp Gly -25 -20 -15	222
TCG GTC CCC CTG TTG TCT CTT TCT CAT TCC ATA GGC ATT TCC CCC ACA Ser Val Pro Leu Ser Leu Ser His Ser Ile Gly Ile Ser Pro Thr -10 -5 1	270
AGG Arg	273
(2) INFORMATION FOR SEQ ID NO: 301: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 163 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR (ii) MOLECULE TYPE: CDNA (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (F) TISSUE TYPE: Heart	
<pre>(ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: complement(78160) (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 97</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: complement(171) (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 98</pre>	

303

region 238..308 id H15081 - est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(2..71)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 234..303

id H16744

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (78..160)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 148..230

id R61691

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(2..72)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 236..306

id R61691

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement (2..85)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 90

region 223..306

id H17833

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: complement(109..160)
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 148..199

id H17833

est

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: 23..73
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.5

seq LVCVGLHTEGPWG/RP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 301:

-15

-10

CAT ACA GAG GGC CCC TGG GGT CGG CCC TCC GGC CTG GCC TCA GCC AGT
His Thr Glu Gly Pro Trp Gly Arg Pro Ser Gly Leu Ala Ser Ala Ser

GGG ATG GAC AGG GCC AGG CCG TCT GAA CTT CCA CCT CCT GGG GCC
Gly Met Asp Arg Ala Arg Gln Ala Ser Glu Leu Pro Pro Pro Gly Ala
10

TCC CAG ACC CCC CAG
Ser Gln Thr Pro Gln
30

(2) INFORMATION FOR SEQ ID NO: 302:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 256 base pairs
 - (B) TYPE: NUCLEIC ACID
 - (C) STRANDEDNESS: DOUBLE
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: CDNA
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 86..256
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 155..325

id H16532

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 5..62
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 1..58

id H16532

est

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 86..256
 - (C) IDENTIFICATION METHOD: blastn
 - (D) OTHER INFORMATION: identity 98

region 170..340

id H17763

- (ix) FEATURE:
 - (A) NAME/KEY: other
 - (B) LOCATION: 8..62

WO 99/06554 PCT/IB98/01238

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 1..55id H17763

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 86..165

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 168..247

id R21494

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 11..62

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 1..52 id R21494

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 183..222

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 268..307

id R21494

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 86..238

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98 region 111..263

id AA084554

est

(ix) FEATURE:

(A) NAME/KEY: other(B) LOCATION: 86..256

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 97

region 136..306

id R52491

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 20..235

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 3.5

seq WFYIGSSLNGTRG/KR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 302:

306

AGAGCTCGCT GTGGCCCGG ATG TTC GGT GCA GCT GCC AGA TCC GCT GAT CTA Met Phe Gly Ala Ala Ala Arg Ser Ala Asp Leu -70 -65															52	
GTG Val	CTT Leu -60	CTC Leu	GAA Glu	AAA Lys	AAC Asn	CTT Leu -55	CAG Gln	GCG Ala	GCC Ala	CAT His	GGG Gly -50	TAT Tyr	GCC Ala	CAA Gln	GAG Glu	100
GAC Asp -45	AGA Arg	GAA Glu	CGA Arg	ATG Met	CAC His -40	AGA Arg	DRT Xaa	ATT Ile	GTC Val	AGC Ser -35	CTT Leu	GSA Xaa	CAG Gln	AAT Asn	CTC Leu -30	148
CTG Leu	AAC Asn	TTT Phe	ATG Met	ATT Ile -25	GGC Gly	TCT Ser	ATC Ile	TTG Leu	GAT Asp -20	TTA Leu	TGG Trp	CAA Gln	TGC Cys	TTC Phe -15	CTC Leu	196
TGG Trp	TTT Phe	TAC Tyr	ATT Ile -10	GGT Gly	TCT Ser	TCA Ser	TTG Leu	AAT Asn -5	GGT Gly	ACT Thr	CGG Arg	GGA G1 y	AAA Lys 1	AGA Arg	GTT Val	244
	GCG Ala 5															256

(2) INFORMATION FOR SEQ ID NO: 303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 132 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Heart

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 3..116

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 1..114

id N87112

est

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 50..130

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98

region 1..81 id AA094982

est

(ix) FEATURE:

(A) NAME/KEY: other

(3) LOCATION: 52..130

307

PCT/IB98/01238

(C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 100 - region 179 id T68050 est	
(ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 47130 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 96 region 184 id AA157180 est	
<pre>(ix) FEATURE: (A) NAME/KEY: other (B) LOCATION: 50130 (C) IDENTIFICATION METHOD: blastn (D) OTHER INFORMATION: identity 97</pre>	
<pre>(ix) FEATURE: (A) NAME/KEY: sig_peptide (B) LOCATION: 43123 (C) IDENTIFICATION METHOD: Von Heijne matrix (D) OTHER INFORMATION: score 3.5</pre>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 303:	
AGCCGGAGCA AAGTTTCACT TATAGAAGGG AGAGGAGCGA AC ATG GCA GCG Met Ala Ala -25	Arg
TGG CGG TTT TGG TGT GTC TCT GTG ACC ATG GTG GTG GCG CTG CT Trp Arg Phe Trp Cys Val Ser Val Thr Met Val Val Ala Leu Le -20 -15 -10	C ATC 102
GTT TGC GAC GTT CCC TCA GCC TCT GCC CGG Val Cys Asp Val Pro Ser Ala Ser Ala Arg -5 1	132
(2) INFORMATION FOR SEQ ID NO: 304: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 436 base pairs (B) TYPE: NUCLEIC ACID (C) STRANDEDNESS: DOUBLE (D) TOPOLOGY: LINEAR	
(ii) MOLECULE TYPE: CDNA	
<pre>(vi) ORIGINAL SOURCE: (A) ORGANISM: Homo Sapiens (D) DEVELOPMENTAL STAGE: Fetal</pre>	

(F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: other(B) LOCATION: 73..238
- (C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100 region 16..181

id W32979

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 316..394
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 96

region 260..338

id W32979

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 251..322
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 194..265

id W32979

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 251..437
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 99

region 107..293

id AA128556

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 145..238
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 100

region 1..94

id AA128556

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 251..381
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

region 104..234

id T20234

est

(ix) FEATURE:

- (A) NAME/KEY: other
- (B) LOCATION: 153..238
- (C) IDENTIFICATION METHOD: blastn
- (D) OTHER INFORMATION: identity 98

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region 6..91 id T20234 - est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 383..437

(C) IDENTIFICATION METHOD: blastn
(D) OTHER INFORMATION: identity 98

region 235..289

id T20234

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 115..238

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 100

region 65..188

id T32594

est

(ix) FEATURE:

(A) NAME/KEY: other
(B) LOCATION: 251..318

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 95

region 201..268

id T32594

est

(ix) FEATURE:

(A) NAME/KEY: other (B) LOCATION: 52..115

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 98 region 1..64

id T32594

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 245..292

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 3.5

seq LLLQPSMIQEVWT/XY

-5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 304:

ATCAGACGCC AGTATAAGCC TTTGAGTCTC AATAGACTGC AGTATCTTAT TGATTTGGGT 60

CGTGTTGATC CTAGTCAACC TATTGACTTA ACCCAGCTTG TCAATGGGAG AGGTGTGACC 120

ATCCAGCCAC TTAAAAGGGA TTATGGTGTC CAGCTGGTTG AGGAGGGTGC TGACACCTTT 180

ACGGCAAAAG TTAATATTGA AGTACAGTTG GCTTCAGAAC TAGCTATTGC TGCCATTGAA 240

AAAA ATG GTG GTG TTG TTA CTA CAG CCT TCT ATG ATC CAA GAA GTC TGG 289

Met Val Val Leu Leu Gln Pro Ser Met Ile Gln Glu Val Trp

-10

436

ACA THG TAT GCA AAC CTG TTC CAT TCT TTC TTC GTG GAC AAC CCA TTC 337 Thr Xaa Tyr Ala Asn Leu Phe His Ser Phe Phe Val Asp Asn Pro Phe 1 CAA AAA GAA TGC TTC CAC CAG AAG AAC TGG TAC CAT ATT ACA CTG ATG 385 Gln Lys Glu Cys Phe His Gln Lys Asn Trp Tyr His Ile Thr Leu Met CAA AGA ACC GTG GGT ACC TGG CGG ATC CTG CCA AAT TTC CTG AAG CAC 433 Gln Arg Thr Val Gly Thr Trp Arg Ile Leu Pro Asn Phe Leu Lys His

(2) INFORMATION FOR SEQ ID NO: 305:

GAC Asp

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 406 base pairs

(B) TYPE: NUCLEIC ACID

(C) STRANDEDNESS: DOUBLE

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: CDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 82..407

(C) IDENTIFICATION METHOD: fasta

(D) OTHER INFORMATION: identity 98.5 region 1..326 id HSARSE

vrt

(ix) FEATURE:

(A) NAME/KEY: other

(B) LOCATION: 88..171

(C) IDENTIFICATION METHOD: blastn

(D) OTHER INFORMATION: identity 96

region 1..84 id AA160312

est

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: 149..241

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 10.5

seq LAVLLSLAPSASS/DI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 305:

AAAACTCGAA	GTTAATCATT CC	CAGCTCAA AG	CCTTGTGC AAG	TGCTCTC TGCC	TTCACG 60
CTTGCTTCCT	TTGGGAGAGA ACC	CTTCCTCT TC	TTGATCGG GGA	TTCAGGA AGGA	GCCCAG 120
GRGCAGAGGA	AGTAGAGAGA GAO	Met]	TTA CAT CTG (Leu His Leu -30	CAC CMT TCT His Xaa Ser -25	TGT 172 Cys
TTG TGT TTC Leu Cys Phe	AGG AGC TGG C Arg Ser Trp I -20	CTG CCA GCG Leu Pro Ala -15	ATG CTC GCT Met Leu Ala	GTA CTG CTA Val Leu Leu -10	AGT 220 Ser
TTG GCA CCA Leu Ala Pro -5	TCA GCT TCC A Ser Ala Ser S	AGC GAC ATT Ser Asp Ile 1	TCC GCC TCC Ser Ala Ser 5	CGA CCG AAC Arg Pro Asn	ATC 268 Ile
CTT CTT CTG Leu Leu Leu 10	ATG GCG GAC G Met Ala Asp A 15	SAC CTT GGC asp Leu Gly	ATT GGG GAC Ile Gly Asp 20	ATT GGC TGC Ile Gly Cys	TAT 316 Tyr 25
GGC AAC AAC Gly Asn Asn	ACC ATG AGG A Thr Met Arg T 30	CT CCG ARN	ATT GAC CGC Ile Asp Arg 35	CTT GCA GAG Leu Ala Glu 40	GAC 364 Asp
GGC GTG AAG Gly Val Lys	CTG ACC CAA C Leu Thr Gln H 45	AC ATC TCT is Ile Ser 50	GCC GCA TCT Ala Ala Ser	TTG TGC Leu Cys 55	406

(2) INFORMATION FOR SEQ ID NO: 306:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 26 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 15.8

seq LLLLLLRHGAQG/KP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 306:

Met Met Trp Arg Pro Ser Val Leu Leu Leu Leu Leu Leu Leu Arg His -20 -15 -10 -5

Gly Ala Gln Gly Lys Pro Ser Pro Asp Ala

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- (2) INFORMATION FOR SEQ ID NO: 307:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 40 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 14 seq LAMLALLSPLSLA/QY
 - (xi) SEQUENCE DESCRIPTION: SEO ID NO: 307:

Met Glu Arg Pro Leu Cys Ser His Leu Cys Ser Cys Leu Ala Met Leu -25-20

Ala Leu Leu Ser Pro Leu Ser Leu Ala Gln Tyr Asp Ser Trp Pro Xaa

Xaa Pro Glu Tyr Phe Gln Gln Pro 10

- (2) INFORMATION FOR SEQ ID NO: 308:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 55 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -18..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 12.3 seq HILFLLLLPVAAA/QT
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 308:

Met Ile His Leu Gly His Ile Leu Phe Leu Leu Leu Pro Val Ala -10

Ala Ala Gln Thr Thr Pro Gly Glu Arg Ser Ser Leu Pro Ala Phe Tyr $1 \hspace{1cm} 5 \hspace{1cm} 10$

Pro Gly Thr Ser Gly Ser Cys Ser Gly Cys Gly Ser Leu Ser Leu Pro 15 20 25 30

Leu Leu Ala Gly Leu Val Ala

- (2) INFORMATION FOR SEQ ID NO: 309:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 31 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 12.2 seq LALALGLAQPASA/RR
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 309:

Met Ala Val Lys Leu Gly Thr Leu Leu Leu Ala Leu Ala Leu Gly Leu
-20 -15 -10

Ala Gin Pro Ala Ser Ala Arg Arg Lys Leu Leu Val Phe Leu Leu
-5 5

- (2) INFORMATION FOR SEQ ID NO: 310:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 74 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 11.9

seq LVLEFLLLSPVEA/QQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 310:

Met Glu Thr Leu Gly Ala Leu Leu Val Leu Glu Phe Leu Leu Ser -20 -15 -10 -5

Pro Val Glu Ala Gln Gln Ala Thr Glu His Arg Leu Lys Pro Trp Leu 1 5 10

Val Gly Leu Ala Ala Val Val Gly Phe Leu Phe Ile Val Tyr Leu Val
15 20 25

Leu Leu Ala Asn Arg Leu Trp Cys Ser Lys Ala Arg Ala Glu Asp Glu 30 35 40

Glu Glu Thr Thr Phe Arg Met Glu Ser Gly
45 50

- (2) INFORMATION FOR SEQ ID NO: 311:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 57 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 11.3 seq PLLLSSLLGGSQA/MD

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 311:

Met Leu Leu Pro Leu Leu Ser Ser Leu Leu Gly Gly Ser Gln Ala
-15 -10 -5

Met Asp Gly Arg Phe Trp Ile Arg Val Gln Glu Ser Val Met Val Pro 1 5 10 15

Glu Gly Leu Cys Ile Ser Val Xaa Leu Leu Phe Leu Leu Pro Pro Thr 20 25 30

Arg Leu Asp Arg Val Tyr Pro Ser Arg

(2) INFORMATION FOR SEQ ID NO: 312:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 136 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 10.7 seq LWLLFFLVTAIHA/EL
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 312:

Met Leu Trp Leu Leu Phe Phe Leu Val Thr Ala Ile His Ala Glu Leu -10 -5 1

Cys Gln Pro Gly Ala Glu Asn Ala Phe Lys Val Arg Leu Ser Ile Arg
5 10 15

Thr Ala Leu Gly Asp Lys Ala Tyr Ala Trp Asp Thr Asn Glu Glu Tyr 20 25 30

Leu Phe Lys Ala Met Val Ala Phe Ser Met Arg Lys Val Pro Asn Arg 35 40 45 50

Glu Ala Thr Glu Ile Ser His Val Leu Leu Cys Asn Val Thr Gln Arg
55 60 65

Val Ser Phe Trp Phe Val Val Thr Asp Pro Ser Lys Asn His Thr Leu
70 75 80

Pro Ala Val Glu Val Gln Ser Ala Ile Arg Met Asn Lys Asn Arg Ile 85 90 95

Asn Asn Ala Phe Phe Leu Asn Asp Gln Thr Leu Glu Phe Leu Lys Ile 100 105 110

Pro Ser Thr Leu Ala Pro Thr Arg 115 120.

- (2) INFORMATION FOR SEQ ID NO: 313:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -27..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 10.7

seq LPLLCLFLQGATA/VL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 313:

Met Ala Gly Ser Pro Ser Arg Ala Ala Gly Arg Arg Leu Gln Leu Pro
-25 -20 -15

Leu Leu Cys Leu Phe Leu Gln Gly Ala Thr Ala Val Leu Phe Ala Val -10 -5 1 5

Phe Val Arg Tyr Asn His Lys Thr Asp Ala Ala Leu Trp Xaa Arg Lys
10 15 20

Leu Gly

- (2) INFORMATION FOR SEQ ID NO: 314:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 55 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -39..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 10.6

seq ALALLLVLPLLWP/CS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 314:

Met Lys Trp Pro Trp Thr Cys Leu Ala Ile Leu Cys Pro Gly Pro Val-35 -30 -25

Leu Ser Pro Pro Cys Ser Gly Pro Xaa Leu Ala Leu Ala Leu Leu Leu -20 -15 -10

Val Leu Pro Leu Leu Trp Pro Cys Ser Val Phe Gly His Ala Leu Cys
-5 1 5

Maa Pro Ser Pro Ala Arg Arg

15

(2) INFORMATION FOR SEQ ID NO: 315:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 10

seq PLLGLLLSLPAGA/DV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 315:

Met Pro Ser Trp Ile Gly Ala Val Ile Leu Pro Leu Leu Gly Leu Leu -20 -15 -10

Leu Ser Leu Pro Ala Gly Ala Asp Val Lys Ala Arg Ser Cys Gly Glu
-5 1 5

Val Arg Gln Ala Tyr Gly Ala Lys Gly Phe Ser Leu Ala Asp Ile Pro 10 20 25

Tyr Gln Glu Ile Ala Xaa Glu His Leu Arg Ile Cys Pro Gln Glu Tyr 30 35 40

Thr Cys Cys Thr Thr Glu Met Glu Asp Lys Leu Ser Gln Gln Ser Lys
45 50 55

Leu Glu Phe Glu Asn Leu Val Glu Glu Thr Ser His Phe Val Arg Thr 60 65 70

Thr Phe Val Ser Arg His Lys Lys Phe Asp Gly Arg
75 80 85

(2) INFORMATION FOR SEQ ID NO: 316:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 48 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 10

seq LWLSLLVPSCLCA/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 316:

Met Leu Leu His Trp Val Arg Ser Gln Xaa Xaa Ser Asp Xaa Lys Leu
-25 -20 -15

Trp Leu Ser Leu Leu Val Pro Ser Cys Leu Cys Ala Ser Pro Trp Pro
-10 -5 1

Leu Pro Ser Leu Pro Leu Leu Leu Pro Pro Ser Leu Leu Ser Leu Leu 5 10 15 20

- (2) INFORMATION FOR SEQ ID NO: 317:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 56 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -34..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.6

seq LLLFSLLVSPPTC/KV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 317:

Met Lys Tyr Leu Arg His Arg Arg Pro Asn Ala Thr Leu Ile Leu Ala
-30 -25 -20

Ile Gly Ala Phe Thr Leu Leu Phe Ser Leu Leu Val Ser Pro Pro
-15 -10 -5

Thr Cys Lys Val Gln Glu Gln Pro Pro Ala Ile Pro Glu Ala Leu Ala 1 5 10

Trp Xaa Thr Pro Pro Thr Arg Trp 15 20

(2) INFORMATION FOR SEQ ID NO: 318:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 127 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -35..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.5 seq AMWWLLLWGVLQA/WP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 318:

Met Pro Gly Pro Arg Val Trp Gly Lys Tyr Leu Trp Arg Ser Pro His
-35 -25 -20

Ser Lys Gly Cys Pro Gly Ala Met Trp Trp Leu Leu Leu Trp Gly Val

Leu Gln Ala Trp Pro Xaa Pro Gly Leu Arg Pro Leu Gly Pro Arg Ala

Thr Pro Ala Ala Asp Ile Pro Arg Val Pro Arg Ala Val Trp Gln Arg
15 20 25

Pro Arg Glu Gln His Gly His Gln Gly Ser Arg Gly Leu Cys Cys Glu 30 40 45

Ala Arg Leu Pro Gly Leu Arg Pro Gly Ala Val Pro Gly Leu Cys Arg
50 55 60

Gly Leu Xaa Xaa Asn Leu Ile Arg Arg Phe Gly Ser Lys Pro Val Leu 65 70 75

Trp Ser Ala Arg Leu Pro Ser Gly Gln Ala Pro Trp Ser Glu Gly 80 85 90

(2) INFORMATION FOR SEQ ID NO: 319:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 71 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN

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- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -37..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.2 seq LLAVLLASWRLWA/IK
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 319:

Met Cys Gly Pro Ala Met Phe Pro Ala Gly Pro Pro Trp Pro Arg Val
-35 -30 -25

Arg Val Val Gln Val Leu Trp Ala Leu Leu Ala Val Leu Leu Ala Ser
-20 -15 -10

Trp Arg Leu Trp Ala Ile Lys Asp Phe Gln Glu Cys Thr Trp Gln Val
-5 1 5 10

Val Leu Asn Glu Phe Lys Arg Val Gly Glu Ser Gly Val Ser Asp Xaa
15 20 25

Ser Leu Ser Lys Ser Pro Gly 30

- (2) INFORMATION FOR SEQ ID NO: 320:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 63 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -55..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.2 seq SLLLLSTALNILA/CQ
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 320:

Met His Arg Arg Lys Leu Pro Leu Thr Asn Lys Arg Gln Leu Gln Lys
-55 -50 -45 -45

Xaa Leu Ser Lys Phe Ile Phe Ser Asp Glu Leu Phe Arg Asn Ile Leu
-35 -30 -25

Phe Ser Leu Arg Thr Leu Arg Met Ile Leu Ser Leu Leu Leu Ser

-20 -15 -10

Thr Ala Leu Asn Ile Leu Ala Cys Gln Ile Asn Glu Glu Leu Gly
-5 l 5

- (2) INFORMATION FOR SEQ ID NO: 321:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 23 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.3

seq VSALLMAWFGVLS/CV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 321:

Met Lys Leu Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu -15 -10 -5

Ser Cys Val Gln Ala Xaa Xaa 1 5

- (2) INFORMATION FOR SEQ ID NO: 322:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.1

seq LCLVCLLVHTAFR/VV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 322:

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Met Gln Leu Pro Leu Ala Leu Cys Leu Val Cys Leu Leu Val His Thr . -10

Ala Phe Arg Val Val Glu Gly Gln Gly Trp Gln Ala Phe Lys Asn Asp

Ala Thr Glu Ile Ile Pro Glu Leu Gly Glu Tyr Pro Glu Pro Pro 20

Glu Arg 30

- (2) INFORMATION FOR SEQ ID NO: 323:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 36 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -31..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8

seg ILLCSVAVXLSPS/EP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 323:

Met Leu Cys Ile His Xaa Xaa Arg Ile Ile Gln Asp Ser Phe Ile Ala

Leu Lys Ile Leu Leu Cys Ser Val Ala Val Xaa Leu Ser Pro Ser Glu -10

Pro Leu Ala Pro

- (2) INFORMATION FOR SEQ ID NO: 324:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 71 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal

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(F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -38..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 7.9

seq LPFLSLFWPWAPG/AV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 324:

Met Gly Gly Phe Phe Pro Pro Thr Glu Val Arg Glu Val Cys Ala Asn -30

Gln Gly Ala Ala His Asn Arg Asp Arg Leu Pro Phe Leu Ser Leu Phe -15

Trp Pro Trp Ala Pro Gly Ala Val Ser Val Gly Gln Ala Arg Tyr Arg

Thr Pro Thr Thr Xaa Ala Pro Ser Ala Ser Val Pro Trp Pro Arg Ala 20

Gly Thr Cys Arg Thr Pro Thr 30

(2) INFORMATION FOR SEQ ID NO: 325:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 37 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -30..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.9 seq HLWILLLFSFCWM/SR
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 325:

Met Lys Leu Phe Tyr Asn Gln Leu Val Ser Glu Thr Lys His Asp Phe -30

Ala His Leu Trp Ile Leu Leu Phe Ser Phe Cys Trp Met Ser Arg -10 -- 5

Ser Phe Phe Phe Phe

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- (2) INFORMATION FOR SEQ ID NO: 326:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 23 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.9

seq LLFFHILFHSCFS/HL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 326:

Met Pro Ser Glu Ser Pro Pro Leu Leu Phe Phe His Ile Leu Phe His -20 -15 -10

Ser Cys Phe Ser His Leu Leu 1

- (2) INFORMATION FOR SEQ ID NO: 327:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -68..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.9

seq LLCSALAWQQSLS/GK

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 327:

Met Ser Ser Met Trp Ser Glu Tyr Thr Ile Gly Gly Val Lys Ile Tyr -65

Phe Pro Tyr Lys Ala Tyr Pro Ser Gln Leu Ala Met Met Asn Ser Ile

-50

-45

-40

Leu Arg Gly Leu Asn Ser Lys Gln His Cys Leu Leu Glu Ser Pro Thr
-35 -30 -25

Gly Ser Gly Lys Ser Leu Ala Leu Leu Cys Ser Ala Leu Ala Trp Gln -20 -15 -10 -5

Gln Ser Leu Ser Gly Lys Pro Ala Asp Glu Gly Val Ser Glu Lys Ala 1 5 10

Glu Val Gln Leu Ser Cys Cys Cys Ala Cys His Ser Lys Asp Phe Thr
15 20 25

Asn Asn Asp Met Asn Gln Gly Thr Ser Arg His Phe Asn Tyr Pro Ser 30 35 40

Thr Pro Arg

(2) INFORMATION FOR SEQ ID NO: 328:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 37 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.8 seq FVRFLGFVSCLQS/DP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 328:

Met Ala Leu Phe Leu Glu Leu Phe Leu Asn Ser Tyr Ser Leu Leu Phe -25 -15

Val Arg Phe Leu Gly Phe Val Ser Cys Leu Gln Ser Asp Pro Ile Cys
-10 -5 1

Ser Phe Phe Phe Phe 5

- (2) INFORMATION FOR SEQ ID NO: 329:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 72 amino acids

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- (B) TYPE: AMINO ACID (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.8

seq LMAGSSLSAGVSG/ED

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 329:

Met Asn Glu Asp Glu Lys Glu Met Lys Glu Ile Leu Met Ala Gly Ser

Ser Leu Ser Ala Gly Val Ser Gly Glu Asp Lys Thr Glu Ile Leu Asn

Pro Thr Pro Xaa Met Ala Lys Ser Leu Thr Ile Asp Cys Leu Glu Leu 10

Ala Leu Pro Pro Glu Leu Ala Phe Gln Leu Asn Glu Leu Phe Gly Pro

Val Gly Ile Asp Ser Gly Ser Leu 45

- (2) INFORMATION FOR SEQ ID NO: 330:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.8 seq IIPLIXXLSLCLC/LW
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 330:

Met Gly Ser Phe Leu Leu Gly Gly Ile Ile Pro Leu Ile Xaa Xaa Leu

-20

-15

-10

Ser Leu Cys Leu Cys Leu Trp Trp Arg Ile Ile

- (2) INFORMATION FOR SEQ ID NO: 331:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 41 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -31..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.8

seq VCLLCSGCSCAWS/VG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 331:

Met Leu Gln Val Ala Thr Thr Asn Tyr Leu Glu Leu Ala Arg Glu Val -30 -25

Lys Pro Val Cys Leu Leu Cys Ser Gly Cys Ser Cys Ala Trp Ser Val -15 -10

Gly Cys Val Xaa Glu Ser Glu Ser Glu 5

- (2) INFORMATION FOR SEQ ID NO: 332:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 22 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -18..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.7

seq PFFLALCFPKSTS/QP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 332:

Met Phe Cys Leu Ala Pro Phe Phe Leu Ala Leu Cys Phe Pro Lys Ser
-15 -10 -5

Thr Ser Gln Pro Gln Arg

- (2) INFORMATION FOR SEQ ID NO: 333:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 72 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -32..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.5 seq QCLLCCISPPVFC/EG
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 333:

Met Ser Glu Ser Arg Phe Gln Pro Gln Asn Gln Gly Gly Ser Leu Gln
-30
-25
-20

Leu Pro Leu Gln Cys Leu Leu Cys Cys Ile Ser Pro Pro Val Phe Cys
-15 -5

Glu Gly Asn Trp Leu Ser Tyr Phe Tyr Val Leu Pro Gly Phe Val Cys
1 5 10 15

Glu Leu His Lys Leu Gly Ile Ser Cys Leu Ile Pro Leu Phe Ser Val 20 25 30

Ser Pro Leu Ala Ala Trp Met Val 35 40

- (2) INFORMATION FOR SEQ ID NO: 334:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR

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(ii) MOLECULE TYPE: PROTEIN

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.3

seq SSCLLGLLHLSSQ/FS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 334:

Met Pro Lys His Cys His Ser Phe Ile Thr Ser Ser Cys Leu Leu Gly

Leu Leu His Leu Ser Ser Gln Phe Ser Cys Pro Gly Arg Lys Leu His -5 1

Pro Ala Gln Arg His Thr Glu Ala Glu Thr Gln Gly Arg Pro Leu Ser 10 20 25

Asp Arg

- (2) INFORMATION FOR SEQ ID NO: 335:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 62 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.2

seq FIXFPFLFPFSFS/QT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 335:

Met Cys Leu Leu Phe Xaa Phe Ile Xaa Phe Pro Phe Leu Phe Pro Phe -15

Ser Phe Ser Gln Thr Phe Ser Phe Ser Gln His Trp Asn Thr Gly Gly 1 5 10

Ser His Pro Glu Glu Leu Glu Arg Pro Gly Ala His Pro Arg Leu Lys
15 20 25

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Ala Arg Pro Gln Pro Pro Leu Phe His Pro Phe Ile Ser Ser 35

- (2) INFORMATION FOR SEQ ID NO: 336:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.1

seq LLVASGXAEGVSA/QS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 336:

Met Ala Ser Glu Arg Xaa Pro Asn Arg Pro Xaa Cys Leu Leu Val Ala -20

Ser Gly Xaa Ala Glu Gly Val Ser Ala Gln Ser Phe Leu Xaa Cys Phe

Thr Met Ala Ser Thr Xaa Phe Asn Leu Gln Val Ala Xaa Pro Gly Gly 10

Lys Ala Met Glu Phe Val Asp Val Thr Xaa Ser Asn Ala Arg Trp Val 30

Gln Asp 40

- (2) INFORMATION FOR SEQ ID NO: 337:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 56 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:

(A) NAME/KEY: sig_peptide

- (B) LOCATION: -25..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 7.1 seq LAFQLVFLRATSG/SC
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 337:

Met Phe Pro Asp Tyr Lys Leu Gly Gly Ser Tyr Leu Leu Ala Phe Gln
-25 -10 -10

Leu Val Phe Leu Arg Ala Thr Ser Gly Ser Cys Ser Lys Tyr Arg Arg

His Leu His Asn Ile Asn Val Arg Pro Gly Leu Val Arg Leu Leu Gly 10 15 20

Ser Cys Ile Gln Lys Gln Pro Gly 25 30

(2) INFORMATION FOR SEQ ID NO: 338:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.1

seq LLLXLXLLLIALE/IM

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 338:

Met Arg Arg Ile Ser Leu Thr Ser Ser Pro Val Arg Leu Leu Xaa -25 -10

Leu Xaa Leu Leu Ile Ala Leu Glu Ile Met Val Gly Gly His Ser
-5 1 5

Leu Cys Phe Asn Phe Thr Ile Lys Ser Leu Ser Arg Pro Gly Gln Pro
10 15 20

Trp Cys Glu Ala His Val Phe Leu Asn Lys Asn Leu Phe Leu Gln Tyr
25 30 35

Asn Ser Asp Asn Asn Met Val Lys Pro Leu Gly Leu Leu Gly Lys Lys 40 45 50 55

Val Tyr Ala Thr Ser Thr Trp Gly Glu Leu Thr Gln Thr Leu Gly Glu 60 . 65 70

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Val Gly Arg Asp Leu Arg Met Leu Leu Cys Asp Ile Lys
75 80

- (2) INFORMATION FOR SEQ ID NO: 339:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 18 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7

seq TFLLLLFXNAGRS/LR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 339:

Met Thr Phe Leu Leu Leu Phe Xaa Asn Ala Gly Arg Ser Leu Arg -10 -5 1

Met Cys

- (2) INFORMATION FOR SEQ ID NO: 340:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 38 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -26..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7 seq EMFLVLLVTGVHS/NK
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 340:

Met Arg Thr Val Val Leu Thr Met Lys Ala Ser Val Ile Glu Met Phe -25 -15

Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr Ala Lys -10 -5 1 5

Lys Ile Lys Arg Pro Gly
10

- (2) INFORMATION FOR SEQ ID NO: 341:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 44 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -40..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.9

seq ISLLFIFFSIANS/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 341:

Met Ser Ser Pro Leu Leu Val Glu Gln Ser Ser Thr Lys Ser Pro Lys -40 -35 -30 -25

Ser Trp Ser Trp Ser Phe Leu Ala Phe Ser Cys Ile Ser Leu Leu Phe
-20 -15 -10

Ile Phe Phe Ser Ile Ala Asn Ser Ser Pro Cys Gly
-5

- (2) INFORMATION FOR SEQ ID NO: 342:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: -25..-1

- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.9

seq IPLLLLFFHLSFL/NS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 342:

Met Tyr Leu Phe Cys Leu Phe Ser Val Ser Lys Thr Ile Pro Leu Leu -25 -15 -10

Leu Leu Phe Phe His Leu Ser Phe Leu Asn Ser Leu
-5

- (2) INFORMATION FOR SEQ ID NO: 343:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 43 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.9

seq CLLILKFLSPAET/SI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 343:

Met Ile Val Cys Leu Leu Ile Leu Lys Phe Leu Ser Pro Ala Glu Thr
-15 -10 -5

Ser Ile Leu Ser Ser Ile Ala Thr Tyr Gly Ala Phe Tyr Phe Ile Val 1 5 10 15

Pro Leu Glu Val Ser Gln Ile Leu Gln Thr Gln
20 25

- (2) INFORMATION FOR SEQ ID NO: 344:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 32 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR

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(ii) MOLECULE TYPE: PROTEIN

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: -25..-1

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 6.7

seq LILCFLFILHTHT/HT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 344:

Met Asp Lys Ser Ile Lys Ser Ser Ile Ile Trp Ser Leu Ile Leu Cys -25 -20

Phe Leu Phe Ile Leu His Thr His Thr His Thr His Thr His -5

(2) INFORMATION FOR SEQ ID NO: 345:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 41 amino acids

(B) TYPE: AMINO ACID

(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: PROTEIN

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: -36..-1

(C) IDENTIFICATION METHOD: Von Heijne matrix

(D) OTHER INFORMATION: score 6.7

seq IFDLLLLLXXSNQ/LP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 345:

Met Phe Phe Ile Phe Ile Asn Gly Phe Thr Leu Leu Leu Met Thr Leu

Ala Met Lys Pro Arg His Pro Ile Phe Asp Leu Leu Leu Leu Xaa -15 -10

Xaa Ser Asn Gln Leu Pro Val Thr Gly 1

(2) INFORMATION FOR SEQ ID NO: 346:



- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 71 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -60..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.7 seq LWPFLTWINPALS/IC
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 346:

Met Cys Pro Ser Leu Glu Glu Ala Pro Ser Val Lys Gly Thr Leu Pro -60 -55 -50 -50

Cys Ser Gly Gln Gln Pro Phe Pro Phe Gly Ala Ser Asn Ile Pro
-40 -35 -30

Leu Leu Cly Arg Ser Arg Lys Val Ala Arg Gly Ala Pro Val Leu
-25 -20 -15

Trp Pro Phe Leu Thr Trp Ile Asn Pro Ala Leu Ser Ile Cys Asp Pro -10 -5 1

Leu Gly Ser Cys Gly Trp Gln

- (2) INFORMATION FOR SEQ ID NO: 347:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 38 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.6 seq LLSALWFCHPCCL/CC

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 347:

Met Leu Gln Asp Leu Leu Ser Ala Leu Trp Phe Cys His Pro Cys Cys
-15 -10 -5

Leu Cys Cys Gly Leu Cys Trp Leu Gly Val Asp Ala Gly Cys Ser Gln
1 5 10 15

Gly Gly Ser Gly Cys Pro 20

- (2) INFORMATION FOR SEQ ID NO: 348:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.6 seq LLSLAAYLSGPHQ/EP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 348:

Met Met Asp Leu Arg Pro Leu Leu Ser Leu Ala Ala Tyr Leu Ser Gly
-15 -10 -5

Pro His Gln Glu Pro Ser Val Pro Thr Arg Asp Gly Asp Val Asn Asn 1 5 10

Leu Pro Lys Pro Asn Pro Ala Arg Ser Val Lys Gln Gly Gly Ile Trp
15 20 25

Lys Ala Glu Gln Glu Arg Val Glu Val Glu 30 35

- (2) INFORMATION FOR SEQ ID NO: 349:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 33 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

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- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart -
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.6

seq LLPGLPLVRTSFS/HF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 349:

Met Glu Met Pro Pro Cys Leu Leu Pro Gly Leu Pro Leu Val Arg Thr -15 -10 -5

Ser Phe Ser His Phe Phe Ser Leu Ser Gly Gly Thr Thr Thr Ala Arg $1 \hspace{1cm} 5 \hspace{1cm} 10$

Gly

- (2) INFORMATION FOR SEQ ID NO: 350:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.5

seq GLAMLHVTRGVXG/SR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 350:

Met Thr Val Glu Leu Trp Leu Arg Leu Arg Gly Lys Gly Leu Ala Met
-25 -15 -10

Leu His Val Thr Arg Gly Val Xaa Gly Ser Arg Val Arg Val Xaa Xaa -5 1 5

Xaa Leu Pro Ala Leu Leu Gly Xaa Pro Arg Ala Leu Ser Ser Xaa Ala 10 15 20

Ala Lys Met Gly Xaa Tyr Arg Xaa Met Trp 25 30

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- (2) INFORMATION FOR SEQ ID NO: 351:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 40 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.4

seq LLILLCSSPPDRV/SY

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 351:

Met Ser Ile Glu Asp Phe Val Asn Arg Ser Ile Leu Leu Ile Leu Leu

Cys Ser Ser Pro Pro Asp Arg Val Ser Tyr Arg Ala Lys Val Leu His -5 1

Ser Leu Leu Gln Leu Pro Ala Gln 10

- (2) INFORMATION FOR SEQ ID NO: 352:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.4

seq FALLFLFLVPVPG/HG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 352:

Met Arg Ile His Tyr Leu Leu Phe Ala Leu Leu Phe Leu Phe Leu Val -20 -15

Pro Val Pro Gly His Gly Gly Ile Ile Asn Thr Leu Gln Lys Tyr Xaa

1 5

PCT/IB98/01238

10

Leu Gln Ser Gln Arg Arg Pro Val Cys Cys Ala Gln Leu Pro Ser Lys

25

Gly Glu Arg 30

- (2) INFORMATION FOR SEQ ID NO: 353:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -13..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.4 seq MCLLTALVTQVIS/LR
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 353:

Met Cys Leu Leu Thr Ala Leu Val Thr Gln Val Ile Ser Leu Arg Lys
-10 -5 1

Asn Ala Glu Arg Thr Cys Leu Cys Lys Arg Arg Trp Pro Trp Xaa Pro
5 10 15

Ser Pro Arg Ile Tyr Cys Ser Ser Thr Pro Cys Asp Ser Lys Phe Pro 20 25 30 35

Thr Val Tyr Ser Ser 40

- (2) INFORMATION FOR SEQ ID NO: 354:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle

3

(ix) FEATURE:

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- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -18..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6.3 seq GLALVAGTPPSRS/CP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 354:

Met Met Gly Asn Pro Gly Leu Ala Leu Val Ala Gly Thr Pro Pro Ser
-15 -10 -5

Arg Ser Cys Pro Gln Ala Asn Ser Gln Thr Arg

- (2) INFORMATION FOR SEQ ID NO: 355:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 91 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -38..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.3

seq PCVSLLWAPRXFA/SS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 355:

Met Asn His Leu Met Pro Leu Thr Val Leu His Ser Val Leu Glu Met
-35 -30 -25

Leu Arg Thr Pro Arg Thr Pro Pro Trp Pro Cys Val Ser Leu Leu Trp -20 -15 -10

Ala Pro Arg Xaa Phe Ala Ser Ser Cys Ser Gln Ala Phe Thr Thr Leu
-5 1 5 10

Xaa Xaa Asn Cys Leu Leu Thr Asn Pro Ser Pro Thr Leu Asp Cys Asp 15 20 25

Leu Pro Glu Gly Ser Glu Ile Leu Asn Ser Ser Leu Tyr Pro His Cys $30 \hspace{1cm} 35 \hspace{1cm} 40$

Leu Leu Ser Ala Trp Asn Thr Arg His Ser Thr
45 50

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- (2) INFORMATION FOR SEQ ID NO: 356:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.3

seq SLLXLRASQLSEG/DT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 356:

Met Gly His Val Val Phe Gly Asp Ile Lys Asn Ser Leu Leu Xaa Leu
-20 -15 -10

Arg Ala Ser Gln Leu Ser Glu Gly Asp Thr Xaa Xaa Xaa Cys Pro
-5 1 5

Xaa Met Xaa Arg Gly Lys His Ile Ser Tyr 10 15

- (2) INFORMATION FOR SEQ ID NO: 357:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 98 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -81..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.3

seq FLSLLXSVSETPG/SL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 357:

Met Ala Gly Gly Arg Arg Asp Tyr Ser Gln Leu Phe Gly Arg Gly Pro
-80 -75 -70

Gly Arg Leu Ser Arg Ala Arg Ala Ser Val Val Arg Trp Ser Pro Arg -65 -55 -50

Ala Thr Ala Cys Pro Ala Pro Pro Ser Leu Pro Asp Leu Lys Arg Gln
-45 -40 -35

Glu Leu Val Ser Arg Ile Glu Cys Gly Cys Arg Gly Pro Val Gly Ala
-30
-25
-20

Thr Ala Asp Phe Phe Leu Ser Leu Leu Xaa Ser Val Ser Glu Thr Pro
-15 -10 -5

Gly Ser Leu Arg Xaa Asn Asp Leu Phe Phe Val Ser Gln Leu Ile Trp
1 5 10 15

Gly Arg

- (2) INFORMATION FOR SEQ ID NO: 358:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 22 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.1 seq LWCFHSFISFSLS/SS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 358:

Met Phe Trp Xaa Gly Ser Leu Trp Cys Phe His Ser Phe Ile Ser Phe -15 -10 -5

Ser Leu Ser Ser Ser Arg

- (2) INFORMATION FOR SEQ ID NO: 359:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 78 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -36..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6

seq FLLTFFSYSLLHA/SR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 359:

Met Ala Trp Pro Asn Val Phe Gln Xaa Gly Ser Leu Leu Ser Gln Phe
-35
-25

Xaa Xaa His His Val Val Val Phe Leu Leu Thr Phe Phe Ser Tyr Ser -20 -15 -10 -5

Leu Leu His Ala Ser Arg Lys Thr Phe Xaa Asn Val Lys Val Ser Ile
1 5 10

Ser Glu Gln Trp Thr Pro Ser Ala Phe Asn Thr Ser Val Glu Leu Pro
15 20 25

Val Glu Ile Trp Ser Ser Xaa His Leu Phe Pro Ser Ala Glu 30 35 40

- (2) INFORMATION FOR SEQ ID NO: 360:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 29 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6

seq WILAVGLSLPSSS/XI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 360:

Met Ile Leu Arg Asn Leu Trp Ile Leu Ala Val Gly Leu Ser Leu Pro-15 -10 -5

Ser Ser Ser Xaa Ile Lys Phe His Phe Ser Leu Tyr Ser 1 5 10



(2) INFORMATION FOR SEQ ID NO: 361:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 41 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -35..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.9

seq LCGLLHLWLKVFS/LK

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 361:

Met Leu Thr Val Asn Asp Val Arg Phe Tyr Arg Asn Val Arg Ser Asn -35 -25 -25

His Phe Pro Phe Val Arg Leu Cys Gly Leu Leu His Leu Trp Leu Lys
-15 -10 -5

Val Phe Ser Leu Lys Gln Leu Lys Lys

- (2) INFORMATION FOR SEQ ID NO: 362:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.9

seq LFLNLCILAXPFS/KQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 362:

Met Asn Leu Lys Pro Gly Leu Pro Cys Asn Leu Phe Leu Asn Leu Cys -20 -15 -10

Ile Leu Ala Xaa Pro Phe Ser Lys Gln Ile Ile Glu Leu Leu Glu Tyr
-5 1 5

Val Ser Tyr His Pro Cys Val Leu Val Tyr Ser Glu Tyr Xaa Asn Ile 10 15 20 25

Ser Ile Val Tyr Thr Leu

(2) INFORMATION FOR SEQ ID NO: 363:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -40..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.9 seq VVLAWGLLNVSMA/GM
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 363:

Met Met Gln Gly Glu Ala His Pro Ser Ala Ser Leu Ile Asp Arg Thr -40 -35 -30 -25

Ile Lys Met Arg Lys Glu Thr Glu Ala Arg Lys Val Val Leu Ala Trp
-20 -15 -10

Gly Leu Leu Asn Val Ser Met Ala Gly Met Ile Tyr Thr Glu Met Thr -5 1 5

Gly Lys Leu Ile Ser Ser Tyr Tyr Asn Val Thr Tyr Trp Pro Leu Trp
10 15 20

Tyr Xaa Glu Leu Ala Leu Ala Ser Leu Phe Ser Leu Asn Ala Leu Phe 25 30 35 40

Asp Phe Trp Arg Tyr Phe Lys Tyr Thr Val Ala Pro Thr Ser Leu Val
45 50 55

Val Ser Pro Gly Arg 60

- (2) INFORMATION FOR SEQ ID NO: 364:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.9

seq PXXLLILAHITQS/CP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 364:

Met Met Asn Gln Thr His Pro Xaa Xaa Leu Leu Ile Leu Ala His Ile -15 -10 -5

Thr Gln Ser Cys Pro Trp Ala His Val Gly Ala Ala Pro Ser Ala Leu
1 5 10

Leu Ile His Arg Trp Glu Leu Arg Gly Cys Ser Tyr Leu Lys Leu Phe
15 20 25

Leu Val Met Val Leu Ile Phe Glu Met Leu 30 35

- (2) INFORMATION FOR SEQ ID NO: 365:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 107 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.8 seq GLVLLLSLAEILF/KI
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 365:

Met Gly Leu Pro Glu Arg Arg Gly Leu Val Leu Leu Leu Ser Leu Ala
-20 -15 -10 -5

Glu Ile Leu Phe Lys Ile Met Ile Leu Glu Gly Gly Gly Val Met Asn 1 5 10

Leu Asn Pro Gly Asn Asn Leu Leu His Gln Pro Pro Ala Trp Thr Asp
15 20 25

Ser Tyr Ser Thr Cys Asn Val Ser Ser Gly Phe Phe Gly Gly Gln Trp 30 35 40

His Glu Ile His Pro Gln Tyr Trp Thr Lys Tyr Gln Val Trp Glu Trp 45 50 55 60

Leu Gln His Leu Leu Asp Thr Asn Gln Leu Asp Ala Asn Cys Ile Pro 65 70 75

Phe Gln Glu Phe Asp Ile Asn Gly Glu Xaa Arg 80 85

(2) INFORMATION FOR SEQ ID NO: 366:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 35 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.8 seq LCWALLYNCFSSS/CV
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 366:

Met Trp Gly Leu Glu Glu Asp Arg Ser Tyr Gln Gly Leu Arg Pro Leu
-25 -20 -15

Cys Trp Ala Leu Leu Tyr Asn Cys Phe Ser Ser Ser Cys Val Pro Val

Ala Leu Val

(2) INFORMATION FOR SEQ ID NO: 367:



- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 91 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -85..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.7 seq ALLASLGIAFSRS/RA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 367:

Met Leu Cys Arg Asp Gly Ser Ala Cys Val Pro Arg Ser Arg Arg Leu
-85 -75 -70

Pro Leu Pro Ala Ala Val Arg Ala His Gly Pro Met Ala Asp Xaa Xaa -65 -60 -55

Asp Ser Ala Arg Gly Cys Val Val Phe Glu Asp Val Phe Val Tyr Phe
-50 -45 -40

Ser Arg Glu Glu Trp Glu Leu Leu Asp Asp Ala Gln Arg Leu Leu Tyr
-35
-25

His Asp Val Met Leu Glu Asn Phe Ala Leu Leu Ala Ser Leu Gly Ile
-20 -15 -10

Ala Phe Ser Arg Ser Arg Ala Val Met Lys Leu
-5 1 5

- (2) INFORMATION FOR SEQ ID NO: 368:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -56..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix

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(D) OTHER INFORMATION: score 5.7

seq FLCFLNLTSHLSG/LD

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 368:

Met Leu Ile Thr Arg Leu Gln Ser Gly Ile Asp Phe Ala Ile Gln Leu
-55 -50 -45

Asp Glu Ser Thr Asp Ile Gly Ser Cys Thr Thr Leu Leu Val Tyr Val
-40 -35 -30 -25

Arg Tyr Ala Trp Gln Asp Asp Phe Leu Glu Asp Phe Leu Cys Phe Leu -20 -15 -10

Asn Leu Thr Ser His Leu Ser Gly Leu Asp Ile Phe Thr Glu Leu Glu
-5 1 5

Arg Arg Gly 10

(2) INFORMATION FOR SEQ ID NO: 369:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -38..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.7 seq LAFLSCLAFLVLD/TQ
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 369:

Met Glu Ser Pro Gln Leu His Cys Ile Leu Asn Ser Asn Ser Val Ala -35 -30 -25

Cys Ser Phe Ala Val Gly Ala Gly Phe Leu Ala Phe Leu Ser Cys Leu
-20 -15 -10

Ala Phe Leu Val Leu Asp Thr Gln Glu Thr Arg Ile Ala Gly Thr Arg
-5 1 5 10

Phe Lys Thr Ala Phe Gln Leu Leu Asp Xaa Ile Leu Ala Val Leu Trp
15 20 25

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- (2) INFORMATION FOR SEQ ID NO: 370:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.7

seq DHLFLLFPRSC\$S/LV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 370:

Met Ser Asn Lys Tyr Ile Lys Pro Ser Met Ser Pro Gly Asn Thr Asp

His Leu Phe Leu Leu Phe Pro Arg Ser Cys Ser Ser Leu Val -5

- (2) INFORMATION FOR SEQ ID NO: 371:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 26 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.6

seq FFFFLFLLPPXPP/TG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 371:

Met Val Glu Leu Lys Gln Leu Gly Pro Arg Ser Phe Phe Phe Phe Leu -15

Phe Leu Leu Pro Pro Xaa Pro Pro Thr Gly -5

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- (2) INFORMATION FOR SEQ ID NO: 372:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 45 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -26..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.5 seq LILPALFFFPLHC/TF
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 372:

Met Pro Tyr Val Thr Ile Pro Tyr Ile Ile Val Tyr Ser Leu Ile Leu
-25 -20 -15

Pro Ala Leu Phe Phe Phe Pro Leu His Cys Thr Phe His Gly Leu Thr -10 -5 1 5

Tyr Tyr Ile Ser Cys Val Cys Ser Leu Ser Leu Pro Thr 10 15

- (2) INFORMATION FOR SEQ ID NO: 373:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.5

seq LLLCMDLPHSVLS/NW

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 373:

Met Pro Pro Leu Ala Ala Val Met Gly Ser Leu Pro Leu Leu Cys

353

-15

-10

Met Asp Leu Pro His Ser Val Leu Ser Asn Trp

-5

-20

- (2) INFORMATION FOR SEQ ID NO: 374:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 23 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:

-25

- (A) NAME/KEY: sig peptide
- (B) LOCATION: -21..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.5

seq EFLFLGFPSNSWP/HR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 374:

Met Leu Gln Ile Pro Glu Arg Arg Glu Phe Leu Phe Leu Gly Phe Pro -20 -15

Ser Asn Ser Trp Pro His Arg

- (2) INFORMATION FOR SEQ ID NO: 375:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 39 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -18..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.5

seq FLITLFCCCVVVG/FF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 375:

Met Phe Phe Val His Phe Leu Ile Thr Leu Phe Cys Cys Cys Val Val -15 -10 -5

Val Gly Phe Phe Gly His Asp His Ser Phe Ile Ser Gln Phe Ile Leu $1 \hspace{1cm} 5 \hspace{1cm} 10$

Val Thr Trp Ala Arg Ala Gly
15 20

- (2) INFORMATION FOR SEQ ID NO: 376:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.5 seq CLLHLRCLQLYWA/AR
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 376:

Met Ala Cys Phe Gly Glu Lys Arg His Ala Lys Ser Cys Leu Leu His
-25 -15 -10

Leu Arg Cys Leu Gln Leu Tyr Trp Ala Ala Arg

- (2) INFORMATION FOR SEQ ID NO: 377:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 32 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix



(D) OTHER INFORMATION: score 5.4

seq PLSLALQSSCCLC/LT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 377:

Met Val Asp Arg Asp Glu Asn Ile Leu Leu Lys Gln Ile Tyr Ser Pro
-25 -20 -15

Leu Ser Leu Ala Leu Gln Ser Ser Cys Cys Leu Cys Leu Thr Ser Cys
-10 -5 1

- (2) INFORMATION FOR SEQ ID NO: 378:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 33 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.4 seq VSVSLCVCDCVRG/ST
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 378:

Met Lys Val Lys Pro Pro Phe Val Ser Val Ser Leu Cys Val Cys Asp
-20 -15 -10 -5

Cys Val Arg Gly Ser Thr Leu Thr Trp Asn Arg Leu Leu Arg Val Gly
1 5 10

Gly

- (2) INFORMATION FOR SEQ ID NO: 379:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (3) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MCLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fecal
 - (F) TISSUE TYPE: kidney

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -39..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.4

seq ILLTSCFYTLVSS/TF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 379:

Met Ile Ser Ser Cys Gly Val Lys Tyr Leu Phe Ser His Ala Ser Leu
-35 -30 -25

Phe Phe Met Val Gly Ser Thr Gly Ser Leu Ile Leu Leu Thr Ser Cys -20 -15 -10

Phe Tyr Thr Leu Val Ser Ser Thr Phe Leu Gln Lys Leu Ser Ser Leu
-5 5

Leu Leu Ile Leu Phe Thr Glu Thr Ser Val Leu Met Leu Lys Thr Phe 10 15 20 25

Val Ala Asn Ser Cys Cys Xaa Leu Trp Ser His Asn Cys Ile Asn Phe 30 35 40

Phe Lys Lys Val Xaa Pro Ser Tyr Cys Xaa Ser Ser Leu Leu Phe Leu
45 50 55

Ala Val Pro Arg 60

- (2) INFORMATION FOR SEQ ID NO: 380:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 25 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.4

seg SFLCNFLVSLSLS/FL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 380:

Met Gly Gly Gly Ile Ala Glu Ser Phe Leu Cys Asn Phe Leu Val Ser -20 -15 -10 -5

Leu Ser Leu Ser Phe Leu His Gly Arg

5

(2) INFORMATION FOR SEQ ID NO: 381:

1

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 48 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -33..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.4

seq LAYFLCCQGVIFG/SL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 381:

Met Asp Ala Leu Glu Arg Gly Ser Leu Arg Asn Glu Gln Ala Leu Val -30 -25 -20

Ile Tyr Ala Gly Leu Ala Tyr Phe Leu Cys Cys Gln Gly Val Ile Phe
-15 -10 -5

Gly Ser Leu Pro Ser Asn Ala Gly Ala Gly Pro Leu Gly Trp Ser Ser

- (2) INFORMATION FOR SEQ ID NO: 382:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 44 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -39..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.3

seq SLWFLPLPTHVYT/HT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 382:

Met Glu Tyr Leu Phe Gln Gln Pro Gly His Ser Arg Gly Glu Ala Arg
-35 -30 -25

Ala Ala Ala Ser Leu Glu Thr Leu Ser Ser Leu Trp Phe Leu Pro
-20 -15 -10

Leu Pro Thr His Val Tyr Thr His Thr His Ala Asn
-5 1 5

- (2) INFORMATION FOR SEQ ID NO: 383:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 35 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -15..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.3 seq SSMLITILSFIFA/LG
 - (xi) SEQUENCE DESCRIPTION: SEO ID NO: 383:

Met Val Ser Ser Met Leu Ile Thr Ile Leu Ser Phe Ile Phe Ala Leu -15 -5 1

Gly Tyr His Thr Ala Ser Tyr Pro Val Ser Leu His Pro Leu Ser Phe
5 10 15

Phe Leu His 20

- (2) INFORMATION FOR SEQ ID NO: 384:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:



- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -18..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.3

seq MNLVSALASSAXG/QR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 384:

Met Pro Leu Phe Thr Met Asn Leu Val Ser Ala Leu Ala Ser Ser Ala

Xaa Gly Gln Arg Gly Ala Gly Pro Ala Leu Trp His Leu Cys $1 \hspace{1cm} 5 \hspace{1cm} 10$

- (2) INFORMATION FOR SEQ ID NO: 385:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 41 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -39..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2

seq LILLLHCSIRVFF/FF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 385:

Met Ile Cys Lys His Tyr Cys Ile Lys Lys Asn Asn Leu Asp Tyr Leu
-35 -30 -25

Asn Arg Met Val Tyr Ser Ala Gln Leu Lys Leu Ile Leu Leu His -20 -15 -10

Cys Ser Ile Arg Val Phe Phe Phe Phe -5

- (2) INFORMATION FOR SEQ ID NO: 386:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -53..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2

seq SFLLLQLIHEDKA/IQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 386:

Met Lys Ile Pro Val Trp His Lys Thr Cys Phe Leu Lys Ser Glu Ser -50

Phe Ser Pro Asp Asn Leu Ser Val Ser Leu Pro Cys Arg Pro Ser Gln -30

Val Pro Ser Gln Gly Gln Gly Lys Ser Phe Leu Leu Leu Gln Leu Ile -15

His Glu Asp Lys Ala Ile Gln Asn Glu Ala Ile Phe Gln Pro Ser Leu

Gln Leu

- (2) INFORMATION FOR SEQ ID NO: 387:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2

seq FGCTFVAFXPAFA/LS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 387:

Met Gly Ala Ala Val Phe Phe Gly Cys Thr Phe Val Ala Phe Xaa Pro -15

Ala Phe Ala Leu Ser Leu Ile Thr Val Ala Gly Asp Arg Gly



(2) INFORMATION FOR SEQ ID NO: 388:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 93 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -34..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2 seq LWSSCWLAPLADG/ML
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 388:

Met Val Gly Gly Leu Asp Pro Pro Gly Arg Arg Phe Gln Lys Gly
-30 -25 -20

Phe Asp Trp Arg Asn Leu Trp Ser Ser Cys Trp Leu Ala Pro Leu Ala
-15
-10
-5

Asp Gly Met Leu Arg Tyr Met Gly Gln Xaa Gln Arg Xaa Ala Ser Asn
1 5 10

Pro Glu Gly Ser Thr Leu Glu Ala Arg Pro Pro Ala Pro Xaa Ala Ser 15 20 25 30

Val Ser Pro Ser Val Xaa Xaa Pro His Arg Pro Trp Ala Ala Lys Met

Glu Thr Val Ser Pro Ala Thr Ser Xaa Ile Ala Gly Gly
50 55

(2) INFORMATION FOR SEQ ID NO: 389:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 23 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -21..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.1

seq SLLVVSCFYQISG/RW

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 389:

Met Ser Lys Met Pro Val Phe Ala Ser Leu Leu Val Val Ser Cys Phe
-20 -15 -10

Tyr Gln Ile Ser Gly Arg Trp
-5

- (2) INFORMATION FOR SEQ ID NO: 390:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 23 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -15..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.1

seq VTQLLPFSSPDSA/GP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 390:

Met Xaa Val Thr Gln Leu Leu Pro Phe Ser Ser Pro Asp Ser Ala Gly
-15 -5 1

Pro Phe Leu Ser Pro Phe Ser 5

- (2) INFORMATION FOR SEQ ID NO: 391:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 72 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle



(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -34..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.1 seq SFHFLPWALGAMA/SS
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 391:

Met Gly Lys Ala Trp Gln Glu Met Arg Val Glu Trp Gly Ala Asp Lys
-30 -25 -20

Gly Asn Val Arg Ser Ser Phe His Phe Leu Pro Trp Ala Leu Gly Ala
-15 -10 -5

Met Ala Ser Ser Glu Gln Gly Lys Glu Arg Ser Asn Leu Cys Pne Arg

Lys Thr Pro Leu Ala Ile Thr Gly Arg Gly Ile Ala Arg Arg Pro Gly 15 20 25 30

Gly Gly Trp Met Gly Met Trp Val

(2) INFORMATION FOR SEQ ID NO: 392:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 55 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -47..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.1 seq VIRLSQFLLKCWP/RT
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 392:

Met Lys Val Met Met Arg Lys Arg Lys Lys Lys Asp Gln Cys Leu Pro
-45 -40 -35

Gly Ile Cys Arg Ser Leu Lys Arg Arg Lys Ser Pro Arg Ser Pro Gly
-30 -25 -20

Met Lys Val Ile Arg Leu Ser Gln Phe Leu Leu Lys Cys Trp Pro Arg

Thr Ser Leu Thr Ala Ala Thr

. 5

(2) INFORMATION FOR SEQ ID NO: 393:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -36..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix

364

(D) OTHER INFORMATION: score 5

seq SFSIXTLLWGLNC/KR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 393:

Met Thr Phe Ser Phe Phe Cys Phe Phe Pro Gly Phe Lys Pro Leu Leu -35 -25

Phe His Tyr Phe Leu Phe Xaa Ser Phe Ser Ile Xaa Thr Leu Leu Trp
-20 -15 -10 -5

Gly Leu Asn Cys Lys Arg Ser Trp Asn Ile Asn Leu Arg Ile Val Xaa 1 5 10

Ser Tyr Ser Ser Gly Tyr
15

- (2) INFORMATION FOR SEQ ID NO: 394:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 65 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -41..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5



seq RLLLILSGCLVYG/TA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 394:

Met Ala Gly Gly Met Lys Val Ala Val Ser Pro Ala Val Gly Pro Gly
-40 -35 -30

Pro Trp Gly Ser Gly Val Gly Gly Gly Gly Thr Val Arg Leu Leu -25 -15 -10

Ile Leu Ser Gly Cys Leu Val Tyr Gly Thr Ala Glu Thr Asp Val Asn
-5 1 5

Val Val Met Leu Gln Glu Ser Gln Val Cys Glu Lys Arg Ala Ser Leu 10 15 20

Gly

(2) INFORMATION FOR SEQ ID NO: 395:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -32..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5 seq PLLSCSCPPPLLG/EG
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 395:

Met Val Glu Met Thr Gly Val Trp Gln Cys Gln Ala Glu Ala Val Lys
-30 -25 -20

Gly Leu Pro Pro Leu Leu Ser Cys Ser Cys Pro Pro Pro Leu Leu Gly
-15 -5

Glu Gly His Ala Gln Ala Ser Pro Leu Ala Gln Glu Glu Asp Lys Lys 1 5 10 15

His Thr Glu Gln Thr Gln Ala Thr Ser Pro Thr Gln Pro 20 25

- (2) INFORMATION FOR SEQ ID NO: 396:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 33 amino acids
- (B) TYPE: AMINO ACID
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5

seq AGLLPLLLGNAPG/ES

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 396:

Met Gln Ile Thr Pro Gly Ser Ala Ala Gly Leu Leu Pro Leu Leu Leu -20 -15 -10

Gly Asn Ala Pro Gly Glu Ser Val Gly Gly Arg Cys Xaa Pro Gly Cys
-5 1 5 10

Trp

- (2) INFORMATION FOR SEQ ID NO: 397:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 33 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5

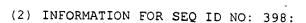
seq TWLLLTLQNSVFT/SF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 397:

Met Ile Leu Ser Thr Trp Leu Leu Leu Thr Leu Gln Asn Ser Val Phe
-15 -10 -5

Thr Ser Phe Arg Ile Ser Pro Asn Arg Ile Gln Ser Met Leu Pro Pro 1 5 10 15

Met



- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -32..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5

seq VCIVLALCHTSRP/MS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 398:

Met Ala Phe His Ser Tyr Trp Gly Lys Ser Leu Gln Ser Phe Lys Thr
-30 -25 -20

Phe Met Arg Val Cys Ile Val Leu Ala Leu Cys His Thr Ser Arg Pro-

Met Ser Tyr His Val Pro Leu Ala Ala Gly Ser Pro Leu Met His Trp

1 10 15

Ser Pro Cys Ser Pro Val Pro Phe Ile Gly
20 25

- (2) INFORMATION FOR SEQ ID NO: 399:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 24 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.9 seg RFTLLPLVLHSOS/SC
 - (Mi) SEQUENCE DESCRIPTION: SEQ ID NO: 399:

Met Lys Leu Arg Phe Thr Leu Leu Pro Leu Val Leu His Ser Gln Ser -15 -5

Ser Cys Val Phe Trp Lys Ala Gly
1 5

- (2) INFORMATION FOR SEQ ID NO: 400:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -30..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.9

seq FIPFLVIYSFVLS/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 400:

Met Met Ile Ile Leu Gly Phe Ala Phe Cys Pro Gly His Phe Arg Phe -30 -25 -20 -15

Asn Phe Ile Pro Phe Leu Val Ile Tyr Ser Phe Val Leu Ser Ser Pro -10 -5 1

His Thr His Arg Glu Pro Tyr Ser Pro Val Ala Asp Phe Asn Glu Cys
5 10 15

Asn Arg Ser 20

- (2) INFORMATION FOR SEQ ID NO: 401:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 46 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:



- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -27..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.9 seq CLLSYIALGAIHA/KI
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 401:

Met Asn Arg Val Pro Ala Asp Ser Pro Asn Met Cys Leu Ile Cys Leu -25 -20 -15

Leu Ser Tyr Ile Ala Leu Gly Ala Ile His Ala Lys Ile Cys Arg Arg -10 -5 1 5

Ala Phe Gl
n Glu Glu Gly Arg Ala Xaa Ala Lys Thr Gly Val
 $10 \,\,$

- (2) INFORMATION FOR SEQ ID NO: 402:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 43 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -15..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.8

seq LFLNLPLVIGTIP/LH

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 402:

Met Asp Leu Phe Leu Asn Leu Pro Leu Val Ile Gly Thr Ile Pro Leu
-15 -5 1

His Pro Phe Gly Ser Arg Thr Ser Ser Val Ser Ser Gln Cys Ser Met 5 10 15

Asn Met Asn Trp Leu Ser Leu Ser Leu Pro Glu 20 25

- (2) INFORMATION FOR SEQ ID NO: 403:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR

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- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -73..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.8

seq VIRSTLVLSQCLC/SR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 403:

Met Xaa Lys Asn His Arg Asn Lys Lys Ser Ile His Phe Pro Leu Cys
-70 -65 -60

Thr Ile Pro Ser Xaa Met Xaa Lys Ser Cys Thr Leu Pro Leu Gln Arg
-55 -50 -45

Thr Trp Asp Xaa Xaa Pro Ser Phe Val His Trp Xaa Gln Ala Arg Leu
-40 -35 -30

Gln Ser Pro Pro Xaa Ser His Leu Val Xaa Leu Ser Val Ile Arg Ser
-25 -20 -15 -10

Thr Leu Val Leu Ser Gln Cys Leu Cys Ser Arg Xaa Pro Tyr Phe Ser
-5

Ala Met Met Thr Pro Lys Cys Lys Ser Ile Xaa Ala Gly Asn Ser Gly
10 15 20

Met Pro Lys Arg Asn Cys Lys Val Leu Pro Ser Ser Glu Lys Met Xaa 25 30 35

Val His

- (2) INFORMATION FOR SEQ ID NO: 404:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 18 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1



- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.8

seq SFIALVYSSLSFQ/KV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 404:

Met Ser Phe Ile Ala Leu Val Tyr Ser Ser Leu Ser Phe Gln Lys Val -10 -5 1

Pro Gly

- (2) INFORMATION FOR SEQ ID NO: 405:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 24 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.7

seq IVLFLNSXFPIIC/SR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 405:

Met Val Phe Asp Thr Leu Lys Ser Arg Ile Val Leu Phe Leu Asn Ser -20 -15 -10

Xaa Phe Pro Ile Ile Cys Ser Arg
-5 1

- (2) INFORMATION FOR SEQ ID NO: 406:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 69 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:

(A) NAME/KEY: sig_peptide

- (B) LOCATION: -59..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.7 seq IFLFSILLMSLRT/FH
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 406:

Met Leu Glu Met Glu Met Thr Trp Leu Arg Leu Cys Asp Glu Cys Ser
-55 -50 -45

Arg Trp Gly Met Ala Ser Ala Trp Gly Arg Gly Gly Lys Leu Leu Gly
-40 -35 -30

Ala Gln Val Ala Leu His Pro Arg Asn Cys Ser Lys Ala Lys Ile Phe
-25 -20 -15

Leu Phe Ser Ile Leu Leu Met Ser Leu Arg Thr Phe His Cys Asn Tyr
-10 -5 1 5

Phe Arg Gly Asn Gly

(2) INFORMATION FOR SEQ ID NO: 407:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 99 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.7 seq MLFFLGALCRESG/VP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 407:

Met Asp Asp Leu Met Leu Phe Phe Leu Gly Ala Leu Cys Arg Glu Ser
-15 -5

Gly Val Pro Ser Leu Gly Lys Gln Glu Arg Met Arg Ala Tyr Ala Ala 1 5 10 15

Glu Met Pro Pro Leu Leu Pro Ser Pro Cys Pro Pro Pro Ser His Leu 20 25 30

Pro Lys Pro Ala Ser Pro Cys Pro Tyr Pro Leu Xaa Leu Leu Thr Phe 35 40 45



Pro Val Gly Val Pro His Leu Pro Gly Thr Arg Leu Gln Cys Gln Gly 50 55 . 60

Leu Gly His Ser Leu Xaa Arg Ala Glu Arg Gly Val Gly Gly Val 65 70 75

Ser Pro Gly 80

- (2) INFORMATION FOR SEQ ID NO: 408:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 71 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6 seq LPTLLLLPVGAPG/KK
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 408:

Met Val Leu Gly Ala Leu Asn Leu Pro Ser Gln Glu Leu Pro Thr Leu -25 -15 -10

Leu Leu Leu Pro Val Gly Ala Pro Gly Lys Lys Lys Gly Met Glu Gly
-5 1 5

Lys Thr Pro Leu Asp Leu Phe Ala His Phe Gly Pro Glu Pro Gly Asp
10 15 20

His Ser Asp Pro Leu Pro Pro Ser Ala Pro Ser Pro Thr Arg Glu Gly 25 30 35

Ala Leu Thr Pro Pro Pro Gly
40 45

- (2) INFORMATION FOR SEQ ID NO: 409:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 34 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

WO 99/06554



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- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq QTFVSFLSIPVLG/LV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 409:

Met Leu Val Ser Lys Ile Gln Thr Phe Val Ser Phe Leu Ser Ile Pro -15

Val Leu Gly Leu Val Pro Asp His Ile Leu Gln Leu Ile Thr Glu Lys

Glu Thr 15

- (2) INFORMATION FOR SEQ ID NO: 410:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 39 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -31..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq LLSTGLNILGTQA/FR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 410:

Met Cys Asn Pro Val Ala His Thr Phe Arg Gly Val His Glu His His

Ala Met Leu Leu Ser Thr Gly Leu Asn Ile Leu Gly Thr Gln Ala Phe -15 -10

Arg Tyr Glu Asp Gly Gln Leu

(2) INFORMATION FOR SEQ ID NO: 411:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6 seq ILLWEACTGRCQA/SL
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 411:
- Met Gln Cys Trp Ile Leu Leu Trp Glu Ala Cys Thr Gly Arg Cys Gln
 -15 -10 -5
- Ala Ser Leu Leu Ser Pro Trp Pro Arg Gly Gly Arg Gly Lys Leu Val
- Ala Val Val Ala Ala Lys Trp Leu Ala Ala Ile Cys Gly Ile Trp Ala
 20 25 30
- Ile Lys Glu Met Pro Ser His Gly His Ser Leu Gln Ala Gly Ala Gly 35 40 45
- Glu Gly Ala Leu Val Thr Trp Ser Leu Gln Thr Ser Phe Gly Val Lys
 50 55 60
- Gln Tyr Lys Trp Gly Val Val Trp His Glu Ala Asn Leu Leu 65 70 75
- (2) INFORMATION FOR SEQ ID NO: 412:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 33 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide

- (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6 seq VLCILGCHGNLCC/EP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 412:

Met Thr Gly Tyr Pro Trp Ala Asn Ser Ile Thr Thr Val Leu Cys Ile
-25 -20 -15 -10

Leu Gly Cys His Gly Asn Leu Cys Cys Glu Pro Ala Val Arg Ala Leu
-5 1 5

Gly

- (2) INFORMATION FOR SEQ ID NO: 413:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 29 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq IFTALFLXLHSVA/IN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 413:

Met Val Ser Cys Asp Val Xaa Ser Tyr Val Ile Ile Phe Thr Ala Leu
-20 -15 -10

Phe Leu Xaa Leu His Ser Val Ala Ile Asn Glu Glu Phe
-5 1 5

- (2) INFORMATION FOR SEQ ID NO: 414:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Dystrophic muscle

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq LFAIFLMCLKSIG/SV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 414:

Met Lys Ser Phe Asp Lys Lys Leu Phe Ala Ile Phe Leu Met Cys Leu -20 -15 -10 -5

Lys Ser Ile Gly Ser Val Val Met Pro Gln Pro

- (2) INFORMATION FOR SEQ ID NO: 415:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -33..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.5 seq LASLFGLDQXAXG/HG
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 415:

Met Phe Gly Ala Gly Asp Glu Asp Asp Thr Asp Phe Leu Ser Pro Ser -30 -25 -20

Gly Gly Ala Arg Leu Ala Ser Leu Phe Gly Leu Asp Gln Xaa Ala Xaa -15 -10 -5

Gly His Gly Asn Glu Phe Phe Gln Tyr Thr Ala Pro Lys Gln Pro Lys
1 5 10 15

Lys Gly Gln Gly Thr Ala Ala Thr Gly Asn Gln Ala Xaa Pro Lys Thr 20 25 30

Ala Pro Ala Xaa Met Ser Thr Pro Thr Ile Leu Val Ala Thr Ala Val 35 40 45

His Ala Tyr Arg Tyr Thr Xaa Gly Xaa Tyr Val Lys Gln Xaa Asn Leu 50 55 60

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Val Leu Gln Phe Trp

(2) INFORMATION FOR SEQ ID NO: 416:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 62 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.5 seq RFLSLSAADGXDX/SX
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 416:
- Met Val Leu Thr Leu Gly Glu Ser Trp Pro Val Leu Val Gly Arg Arg -25 -20 -15
- Phe Leu Ser Leu Ser Ala Ala Asp Gly Xaa Asp Xaa Ser Xaa Asp Ser -10 -5 1
- Trp Asp Val Glu Arg Val Ala Glu Trp Pro Trp Leu Ser Gly Thr Ile
 5 10 15 20
- Arg Ala Val Ser His Thr Asp Val Thr Lys Lys Asp Leu Lys
 25 30
- (2) INFORMATION FOR SEQ ID NO: 417:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 23 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1



- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.4 seq LTSVFQAMIWSQG/VS
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 417:

Met Val Ile Glu Leu Thr Ser Val Phe Gln Ala Met Ile Trp Ser Gln -15 -10 -5

Gly Val Ser Asp Ser Ser Lys 1 5

- (2) INFORMATION FOR SEQ ID NO: 418:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 68 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -50..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4 seq ILFLFYFPAAYYA/SR
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 418:

Met Glu Ser Thr Leu Gly Ala Gly Ile Val Ile Ala Glu Ala Leu Gln
-50 -45 -40 -35

Asn Gln Leu Ala Trp Leu Glu Asn Val Trp Leu Trp Xaa Xaa Leu Xaa -30 -25 -20

Xaa Xaa Ile Pro Xaa Ile Leu Phe Leu Phe Tyr Phe Pro Ala Ala Tyr
-15 -10 -5

Tyr Ala Ser Arg Arg Val Gly Ile Ala Val Leu Trp Ile Ser Leu Ile 1 5 10

Thr Glu Trp Leu 15

- (2) INFORMATION FOR SEQ ID NO: 419:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 31 amino acids
 - (B) TYPE: AMINO ACID

- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN .
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq VLVGVFLSTFLYC/EC

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 419:

Met Ile Ile Val Ser Glu Leu Gly Thr Pro Thr Gly Val Leu Val Gly -25 -15 -10

Val Phe Leu Ser Thr Phe Leu Tyr Cys Glu Cys Val Lys Gly Pro
-5 1 5

- (2) INFORMATION FOR SEQ ID NO: 420:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 37 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq GFLLCPLVCGLRR/WT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 420:

Met Asn Trp Asn Val Arg Gly Thr Arg Gly Phe Leu Leu Cys Pro Leu
-20 -15 -10

Val Cys Gly Leu Arg Arg Trp Thr Ser Pro Asp Cys Cys Leu Ile Glu
-5 5 10

Lys Thr His Arg Gly

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- (2) INFORMATION FOR SEQ ID NO: 421:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 21 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq RGLLLGLAVAAAA/VR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 421:

Met Leu Arg Cys Gly Gly Arg Gly Leu Leu Leu Gly Leu Ala Val Ala -15 -10

Ala Ala Val Arg

- (2) INFORMATION FOR SEQ ID NO: 422:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq ILLMIVFSIFLLL/CN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 422:

Met Ile Leu Leu Met Ile Val Phe Ser Ile Phe Leu Leu Cys Asn -10

Leu Thr Aso Phe Tyr Leu Phe Arg Ser Asp Gly 10



- (2) INFORMATION FOR SEQ ID NO: 423:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 22 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq SLLFIFRSILISC/FS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 423:

Met Ser Leu Leu Phe Ile Phe Arg Ser Ile Leu Ile Ser Cys Phe Ser -10 -5 1

Gly Asp Phe Phe Phe 5

- (2) INFORMATION FOR SEQ ID NO: 424:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 46 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3 seq SKVLIQLSQAFWA/SP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 424:

Met Pro Leu Ile Ser Lys Val Leu Ile Gln Leu Ser Gln Ala Pne Trp -15 -10 -5

Ala Ser Pro Glu Gly Arg Asn Ser Ser Gly Ser Lys Arg Lys Gln Leu
1 5 10 15

Val Ala Ala Val Glu Met Arg Tyr Cys Lys Arg Gln Gln Gly 20 25

- (2) INFORMATION FOR SEQ ID NO: 425:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -29..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3

seq VLLGSTAMATSLT/NV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 425:

Met Asp Thr Ser Ser Val Gly Gly Leu Glu Leu Thr Asp Gln Thr Pro
-25 -20 -15

Val Leu Gly Ser Thr Ala Met Ala Thr Ser Leu Thr Asn Val Gly
-10 -5 1

Asn Ser Phe Ser Gly Pro Ala Asn Pro Leu Val Ser Arg Ser Asn Lys
5 10 15

Phe Gln Asn Ser Ser Val Glu Asp Asp Asp Asp Val Val Phe Ile Glu 20 25 30 35

Pro Val Gln Pro Pro Pro Pro Ser Val Pro Val Val Ala Asp Gln Arg
40 45 50

Thr Ile Thr Phe Thr Ser Ser Lys Asn Xaa Glu Leu Gln Gly Asn Asp
55 60 65

Ser Lys Ile Thr Pro Ser Ser Lys Glu Leu Ala Ser 70 75

- (2) INFORMATION FOR SEQ ID NO: 426:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: 'AMINO ACID
 - (D) TOPOLOGY: LINEAR

WO 99/06554

PCT/IB98/01238

- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -31..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3

seq ILLLTHVPPWILE/NP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 426:

Met Asp Thr Gly Glu Ser Phe Ser Pro His Thr Ser Cys Arg Gly His -30 -25 -20

Trp Arg Ile Leu Leu Thr His Val Pro Pro Trp Ile Leu Glu Asn -15 -5 1

Pro Ser Cys His Thr Arg Pro Ala Val Asp Thr Gly Glu Ser Phe Ser 5 10 15

Pro Gln Arg 20

- (2) INFORMATION FOR SEQ ID NO: 427:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -31..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3 seq LVLLSVLKEPVSR/SI
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 427:

Met Pro Tyr Leu Asp Pro Tyr Ile Thr Gln Pro Ile Ile Gln Ile Glu
-30 -25 -20

Arg Lys Leu Val Leu Leu Ser Val Leu Lys Glu Pro Val Ser Arg Ser -15 -5 1

Dha Arm Mara Ala I an Arm Con I an Arm

Ile Phe Asp Tyr Ala Leu Arg Ser Lys Asp Ile Thr Ser Leu Phe Arg
5 10 15

His Leu His Met Arg Gln Lys Lys Arg Asn Gly Ser Leu Pro Asp Cys
20 25 30

Pro Pro Pro Glu Asp Pro Ala Ile Ala Gln Leu Leu Lys Lys Leu Leu 35 40 45

Ser Gln Gly Met Thr Glu Glu Glu Glu Asp Lys Leu Leu Ala Leu Lys
50 55 60 65

Asp Phe Met Met

(2) INFORMATION FOR SEQ ID NO: 428:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 44 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -29..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3 seq VLLGSTAMATSLT/NV
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 428:

Met Asp Thr Ser Ser Val Gly Gly Leu Glu Leu Thr Asp Gln Thr Pro -25 -20 -15

Val Leu Leu Gly Ser Thr Ala Met Ala Thr Ser Leu Thr Asn Val Gly
-10 -5 1

Asn Ser Phe Ser Gly Pro Ala Asn Pro Leu Val Ser
5 10 15

- (2) INFORMATION FOR SEQ ID NO: 429:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 amino acids
 - (3) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -28..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.2

seq FGLLDFVVQCCDS/LR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 429:

Met His Val Leu Phe Asn Ile Val Thr Thr Asn Xaa Xaa Asn His Phe -25 -20 -15

Gly Leu Leu Asp Phe Val Val Gln Cys Cys Asp Ser Leu Arg Asn His

Xaa Xaa Ser Phe Gln Ser Ser Tyr Leu Arg Leu Asn His Ser Xaa His 5 10 15 20

Thr Cys

(2) INFORMATION FOR SEQ ID NO: 430:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq TAYWLSFMSWAQS/SS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 430:

Met Pro Pro Gln Ser Cys Cys Ser Lys Thr Ala Tyr Trp Leu Ser Phe
-20 -15 -10

Met Ser Trp Ala Gln Ser Ser Ser Phe Gly Ser Arg Xaa Glu Ser Thr
-5 1 5 10

Ser Pro Cys Thr Asp His Cys Ser Gly Pro Arg Glu Glu Gln Leu Cys
15 20 25

Ser Ser Arg Val Phe His Cys Ile Thr His Pro Asn Gly Arg Ile His

WO 99/06554 PCT/IB98/01238

40

35

Arg Trp

(2) INFORMATION FOR SEQ ID NO: 431:

30

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 25 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq SCVFFHFLQGGLG/FG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 431:

Met Ser Cys Val Phe Phe His Phe Leu Gln Gly Gly Leu Gly Phe Gly
-10
-5

Ser Ala Gly Arg Cys Ala Gly Asp Arg
5 10

- (2) INFORMATION FOR SEQ ID NO: 432:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2 seq LILLPIWINMAQI/QQ
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 432:

Met Ser Ile Ser Leu Ser Ser Leu Ile Leu Leu Pro Ile Trp Ile Asn -20 -15 -10 -5

Met Ala Gln Ile Gln Gln Gly Gly Pro Asp Glu Lys Glu Lys Thr Thr $1 \hspace{1cm} 5 \hspace{1cm} 10$

Ala Leu Lys Asp Leu Leu Ser Arg Ile Asp Leu Asp Glu Leu Met Lys
15 20 25

Lys Asp Glu Pro Pro Gly

- (2) INFORMATION FOR SEQ ID NO: 433:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 52 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -34..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2 seq SFCNAVVLSPVFQ/EE
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 433:

Met Thr Ala Leu Asn Leu Val Ala Pro Phe Ser Asp Gly Asp Ser Gly -30 -25 -20

Ser Val Ser Leu Ala Ser Phe Cys Asn Ala Val Val Leu Ser Pro Val

Phe Gln Glu Glu His Leu Leu Phe Gln Lys Arg Lys Thr Lys Thr

Trp Pro Pro Arg

- (2) INFORMATION FOR SEQ ID NO: 434:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 39 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) CRIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens
(F) TISSUE TYPE: Kidney

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: -17..-1

- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.2

seq PVQVLGLLATCQH/AP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 434:

Met Trp Ser Arg Pro Val Gln Val Leu Gly Leu Leu Ala Thr Cys Gln
-15 -10 -5

His Ala Pro Ser Pro Ser Phe Lys Gly Glu Thr Cys Thr Glu Ile Glu
1 5 10 15

Ser Val Tyr Leu Ala Pro Met 20

(2) INFORMATION FOR SEQ ID NO: 435:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq SLNQILLFLLISC/RT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 435:

Met Arg Tyr Arg Leu Arg Ile Gln Ile Thr Thr Ser Leu Asn Gln Ile
-20
-15
-10

Leu Leu Phe Leu Leu Ile Ser Cys Arg Thr Leu Ser
-5

(2) INFORMATION FOR SEQ ID NO: 436:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 35 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2 seq VLLFFCCSPLYSP/LF
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 436:

Met Pro Phe Phe Ser Asn Gln Pro Thr Gln Val Ser Val Leu Leu Phe -25 -15 -10

Phe Cys Cys Ser Pro Leu Tyr Ser Pro Leu Phe Leu Leu Xaa Leu Ile

Pro His Gln 10

- (2) INFORMATION FOR SEQ ID NO: 437:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -44..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1 seq IAVGLTCQHVSHA/IS
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 437:

Met Arg Val Lys Asp Pro Thr Lys Ala Leu Pro Glu Lys Ala Lys Arg -40 -35 -30

Ser Lys Arg Pro Thr Val Pro His Asp Glu Asp Ser Ser Asp Asp Ile -25 -20 -15

Ala Val Gly Leu Thr Cys Gln His Val Ser His Ala Ile Ser Val Asn -10 -5 1

His Val Lys Arg Ala Ile Ala Glu Asn Leu Trp Ser Val Cys Ser Glu 5 10 . 15 20

Cys Leu Lys Glu Arg Arg Phe Tyr Asp Gly Gln Leu Val Leu Thr Ser 25 30 35

Asp Ile Trp Leu Cys Leu Lys Cys Gly Phe Gln Gly Cys Gly Lys Asn
40 45 50

Ser Glu Ser Gln His Ser Leu Lys His Phe Lys Ser Ser Arg Thr Glu
55 60 65

Pro Leu Arg 70

- (2) INFORMATION FOR SEQ ID NO: 438:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 48 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -44..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1 seq GTYLTSSSPLCQL/QP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 438:

Met Val Ser Leu Gly Tyr Tyr Leu Ile Phe Val Leu Tyr Leu Trp Leu
-40 -35 -30

Cys Phe Met Gln Ile Ser Glu Glu Lys Leu Ile Glu Glu His Thr Gly
-25 -20 -15

Thr Tyr Leu Thr Ser Ser Ser Pro Leu Cys Gln Leu Gln Pro Pro Gly
-10 -5 1

- (2) INFORMATION FOR SEQ ID NO: 439:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 44 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN



- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -35..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1

seq VLCCLLIATPTFF/LL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 439:

Met Ser Leu Thr Ser Arg Xaa Xaa Ile Met Xaa Thr Ile Lys Ile Gln
-35 -20 -25

Asn Ile Ser Ile Thr Lys Val Leu Cys Cys Leu Leu Ile Ala Thr Pro $-15 \\ -10 \\ -5$

Thr Phe Phe Leu Leu Pro Ser Ser Ile Pro Arg

- (2) INFORMATION FOR SEQ ID NO: 440:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (3) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -18..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1

seq AGVVSTSVAAAVA/AV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 440:

Met Xaa Ala Glu Ala Ala Gly Val Val Ser Thr Ser Val Ala Ala Ala -15 -10 -5

Val Ala Ala Val Ala Ala Pro Ala Gly Ala Gly
1

- (2) INFORMATION FOR SEQ ID NO: 441:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 32 amino acids
- (B) TYPE: AMINO ACID
- (D) TOPOLOGY: LINEAR -
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -15..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seq IMSSCLALTYTNS/IS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 441:

Met Trp Ile Met Ser Ser Cys Leu Ala Leu Thr Tyr Thr Asn Ser Ile
-15 -5 1

Ser His Ser Leu Cys Leu Glu Arg Ala Tyr Ser Leu Phe Lys Val Asp
5 10 15

- (2) INFORMATION FOR SEQ ID NO: 442:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seg SNALVLVTRGSSS/LP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 442:

Met Pro Arg Gly Val Tyr Asn Ser Asn Ala Leu Val Leu Val Thr Arg -20 -15 -10 -5

Gly Ser Ser Ser Leu Pro Leu Gly Leu Tyr Gly Ile Asn Cys Val Gln
1 5 10

Val Ile Lys Leu Phe Tyr Arg Gly His Leu His Trp Glu Thr Leu Leu 15 20 25 30

- (2) INFORMATION FOR SEQ ID NO: 443:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 48 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -44..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4 seq FLLPCVHPFSVIA/VY
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 443:

Met Ile Glu Pro Cys Glu Lys Met Lys His Tyr Asp Met Asn Trp Phe

Leu Cys Met Tyr Glu Cys Phe Phe Phe His Leu Leu Glu Thr Glu Phe -20

Leu Leu Pro Cys Val His Pro Phe Ser Val Ile Ala Val Tyr Val Phe -10 -5 1

- (2) INFORMATION FOR SEQ ID NO: 444:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -55..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4 seq AALCGISLSQXFP/EP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 444:

Met Ala Met Trp Asn Arg Pro Cys Gln Xaa Leu Pro Gln Gln Pro Leu
-55 -45 -45

Val Ala Glu Pro Thr Ala Glu Gly Glu Pro His Leu Pro Thr Gly Arg
-35 -30 -25

Glu Leu Thr Glu Ala Asn Arg Phe Ala Tyr Ala Ala Leu Cys Gly Ile
-20 -15 -10

Ser Leu Ser Gln Xaa Phe Pro Glu Pro Gly
-5

- (2) INFORMATION FOR SEQ ID NO: 445:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seq CLLVSYAVDSAAG/RF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 445:

Met Glu Gln Val Cys Leu Leu Val Ser Tyr Ala Val Asp Ser Ala Ala
-15 -10 -5

Gly Arg Phe Gly

- (2) INFORMATION FOR SEQ ID NO: 446:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

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- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seq ATLRCWASTPVSG/RL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 446:

Met Arg Lys Ile Ser His Cys Leu His Cys Trp Pro Glu Ser Gly Ala
-25 -20 -15

Thr Leu Arg Cys Trp Ala Ser Thr Pro Val Ser Gly Arg Leu Ser Ser -10 -5 1

Met Ala Val Xaa Xaa Xaa Gly Glu Xaa Pro Pro Gln Asp Ala Phe Thr 5 10 15 20

Thr Gln Trp Leu Val Arg Asp Leu Arg Gly Lys Thr Glu Lys Glu Phe
25 30 35

Lys Ala Tyr Val Ser Leu Phe Met Arg His Leu Cys Glu Pro Gly Ala 40 45 50

Asp Gly Ser Glu Thr Phe Ala Asp Gly Val Pro Arg Glu Gly Leu Ser 55 60 65

Arg Gln Gln Val Leu Thr Arg Ile Gly Val Met Ser Leu Val Lys Lys 70 75 80

Lys Gly Gln 85

- (2) INFORMATION FOR SEQ ID NO: 447:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 26 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seq LLHPCGSITLTSS/ST

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 447:

Met Cys Ile Asn Asp His Ile Ile Lys Leu Leu His Pro Cys Gly Ser

-20

-15

-10

Ile Thr Leu Thr Ser Ser Ser Thr Thr Arg
-5

- (2) INFORMATION FOR SEQ ID NO: 448:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 45 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seq VALQCGLTIPALX/LP

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 448:
- Met Arg Cys Arg Val Ala Leu Gln Cys Gly Leu Thr Ile Pro Ala Leu
 -15 -10 -5
- Xaa Leu Pro Gln Gly Asp Glu Ala Gly Asp Ala Gln Asp Leu Arg Gly
 1 5 10 15

Pro Ala Gln Ala Glu Tyr Leu Tyr Ile Ile Ser Pro Ser 20 25

- (2) INFORMATION FOR SEQ ID NO: 449:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 118 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -93..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq LTSAFLWLPRLHI/SV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 449:

Met Thr Val Arg Tyr Gly Lys Phe Leu Ser Leu Leu Lys Asp Gly Ala
-90 -85 -80

Glu Asn Asp Leu Thr Trp Val Leu Lys His Cys Glu Arg Phe Leu Lys
-75 -70 -65

Gln Gln Gln Thr Ser Ile Lys Ser Ser Leu Leu Cys Leu Gln Gly Asn
-60 -55 -50

Tyr Ala Gly His Asp Trp Phe Val Ser Ser Leu Phe Met Ile Met Leu
-45 -35 -30

Gly Asp Lys Glu Lys Thr Phe Gln Phe Leu His Gln Phe Ser Arg Leu
-25 -20 -15

Leu Thr Ser Ala Phe Leu Trp Leu Pro Arg Leu His Ile Ser Val Arg
-10 -5 1

Leu Gln Ser Val Phe Lys Gly Gly Phe Xaa Ile Leu Arg Thr Leu Tyr 5 10 15

Leu His Ser Xaa Gly Arg 20 25

(2) INFORMATION FOR SEQ ID NO: 450:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 34 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq FFWVVLFSAGCKV/IT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 450:

Met Ala Phe Asp Val Ser Cys Phe Phe Trp Val Val Leu Phe Ser Ala -20 -15 -10 -5

Gly Cys Lys Val Ile Thr Ser Trp Asp Gln Met Cys Ile Glu Lys Glu $1 \hspace{1cm} 5 \hspace{1cm} 10$

Ala Thr

(2) INFORMATION FOR SEQ ID NO: 451:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 41 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq HLSSTTSPPWTHA/AI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 451:

Met Leu Thr Arg Leu Val Leu Ser Ala His Leu Ser Ser Thr Thr Ser
-20 -15 -10

Pro Pro Trp Thr His Ala Ala Ile Ser Trp Glu Leu Asp Asn Val Leu
-5 1 5 10

Met Pro Ser Pro Arg Ile Trp Pro Leu
15

- (2) INFORMATION FOR SEQ ID NO: 452:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -40..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9
 - seq CVNLLLGFEPVIS/RS
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 452:

Met Arg Tyr Phe Gln Gly Pro Ser Pro Tyr Ser Glu Ile Glu Ile Glu -40 -35 -30 -25

Leu Cys Asp His Val Tyr Ser Phe Gln Gly Leu Cys Val Asn Leu Leu -20 -15 -10

Leu Gly Phe Glu Pro Val Ile Ser Arg Ser Arg Xaa Ser Ser Leu Ala-5 1 5

Val Glu Ser 10

- (2) INFORMATION FOR SEQ ID NO: 453:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 70 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -41..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq LASLECYVPSTNQ/WQ

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 453:
- Met Xaa Xaa Lys Arg Thr His Xaa Xaa Xaa Ser Val Phe Asn Gly Leu
 -40 -35 -30
- Val Tyr Ala Ala Gly Gly Arg Asn Ala Glu Gly Ser Leu Ala Ser Leu -25 -15 -10
- Glu Cys Tyr Val Pro Ser Thr Asn Gln Trp Gln Pro Lys Xaa Xaa Leu -5 1 5
- Glu Val Ala Arg Cys Cys His Ala Ser Ala Val Ala Asp Gly Arg Val
 10 15 20

Leu Val Thr Gly Gly Leu 25

- (2) INFORMATION FOR SEQ ID NO: 454:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 43 amino acids

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- (B) TYPE: AMINO ACID
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -38..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq LLFFHLLLNDFFT/FY

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 454:

Met Phe Leu Lys Val Gln Ser Gln Ser Phe Tyr Xaa Pro Tyr Arg Asp
-35 -30 -25

Cys Leu Asn Phe His Lys Ser Thr Tyr Leu Leu Phe Phe His Leu Leu -20 -15 -10

Leu Asn Asp Phe Phe Thr Phe Tyr Xaa Ala Lys
-5 1 5

- (2) INFORMATION FOR SEQ ID NO: 455:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 36 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -27..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq WIILIIYTFQCNS/SL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 455:

Met Gln Pro Leu Lys Ile Ile Phe Tyr Leu Ser Val Ser Ile Trp Ile -25

Ile Leu Ile Ile Tyr Thr Phe Gln Cys Asn Ser Ser Leu Ser Ile Leu
-10 -5 1 5

Leu Leu Glu Leu

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- (2) INFORMATION FOR SEQ ID NO: 456:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq RVAACTAAAPLQA/HG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 456:

Met Met Arg Thr Thr Ala Arg Val Ala Ala Cys Thr Ala Ala Ala Pro -15 -10

Leu Gln Ala His Gly Ala Xaa Ile Gln Gln Xaa Pro Asp Xaa Leu Xaa

Ser Xaa Arg Leu Ser Arg Xaa Gly Leu Ser Ala Gly Arg Leu His Gln 20

Ser Glu Thr Glu Ala Glu Leu Glu Ala Pro Gly Arg Ala 30

- (2) INFORMATION FOR SEQ ID NO: 457:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 45 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -34..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8 seq RWASSCLHPSARS/SN
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 457:

Met Glu Ala Ala Thr Thr Leu His Pro Gly Pro Arg Pro Ala Leu Pro
-30 -25 -20

Leu Gly Ala Arg Ala Arg Trp Ala Ser Ser Cys Leu His Pro Ser Ala -15 -10 -5

Arg Ser Ser Asn Pro Ala Gly Lys Ser Ser Arg Thr Pro l 5 10

(2) INFORMATION FOR SEQ ID NO: 458:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 35 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -29..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8 seq LCPVIFFPSNCWK/EY
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 458:

Leu Cys Pro Val Ile Phe Phe Pro Ser Asn Cys Trp Lys Glu Tyr Asn
-10 -5 1

Arg Thr Gln 5

- (2) INFORMATION FOR SEQ ID NO: 459:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -18..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8

seq FXLLFXXFXFFRQ/XG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 459:

Met Xaa Xaa Phe Ser Phe Xaa Leu Leu Phe Xaa Xaa Phe Xaa Phe Phe
-15 -10 -5

Arg Gln Xaa Gly

- (2) INFORMATION FOR SEQ ID NO: 460:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 31 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8

seq SVRLLFRFSVIMA/SE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 460:

Met Leu Leu Ser Glu Ala Leu Ser Glu Ser Val Arg Leu Leu Phe

Arg Phe Ser Val Ile Met Ala Ser Glu Lys Gln Ser Phe Gln Ile
-5 1 5

- (2) INFORMATION FOR SEQ ID NO: 461:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 27 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens

- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8

seg SLPCTTAFPLLSS/KV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 461:

Met Ala Leu Ile Ser Leu Pro Cys Thr Thr Ala Phe Pro Leu Leu Ser
-15 -10 -5

Ser Lys Val Ser Gln Leu Leu Leu Pro Leu Ser 1 5 10

- (2) INFORMATION FOR SEQ ID NO: 462:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 57 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -37..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8

seq RVVALPLVRATCT/AV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 462:

Met Ser Glu Glu Glu Ala Ala Gln Ile Pro Arg Ser Ser Val Trp Glu
-35 -30 -25

Gln Asp Gln Gln Asn Val Val Gln Arg Val Val Ala Leu Pro Leu Val -20 -15 -10

Arg Ala Thr Cys Thr Ala Val Cys Asp Val Tyr Ser Ala Ala Lys Asp -5 1 5 10

Arg His Pro Leu Leu Gly Ser Ala Trp
15 20

- (2) INFORMATION FOR SEQ ID NO: 463:
 - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR -
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -72..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.8

seq LAELTVDPQGALA/IR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 463:

Met Ala Ala Ala Ala Ala Gly Ala Ala Ser Gly Leu Pro Gly Pro
-70 -65 -60

Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly Ile
-55 -50 -45

Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile Lys -40 -35 -30 -25

Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu Thr -20 -15 -10

Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val Ile
-5 1 5

Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys Phe 10 20

Arg 25

- (2) INFORMATION FOR SEQ ID NO: 464:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -117..-1

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- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.8 seq XXXYLNFCPVCYC/FS
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 464:

Met Asn Ser Gly Gly Gly Phe Gly Leu Gly Leu Gly Phe Gly Leu Thr -110

Pro Thr Ser Val Ile Gln Val Thr Asn Leu Ser Ser Ala Val Thr Ser

Glu Gln Met Arg Thr Leu Phe Ser Phe Leu Gly Glu Ile Glu Glu Leu -85 -75

Arg Leu Tyr Pro Pro Asp Asn Ala Pro Leu Ala Phe Ser Ser Xaa Val

Cys Tyr Val Lys Phe Arg Asp Pro Ser Ser Val Gly Val Ala Gln His -45

Leu Thr Asn Thr Val Phe Ile Asp Arg Xaa Leu Xaa Ser Cys Ser Leu -35

Cys Arg Arg Leu Val Ser Arg Phe Xaa Xaa Xaa Tyr Leu Asn Phe Cys

Pro Val Cys Tyr Cys Phe Ser Phe Pro Arg Asp Trp Gln Val Asp Ser

Thr Leu

- (2) INFORMATION FOR SEQ ID NO: 465:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 43 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -13..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.7 seq MIEMLIFLDCVLS/SK
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 465:
- Met Ile Glu Met Leu Ile Phe Leu Asp Cys Val Leu Ser Ser Lys Asp

Thr Ile Thr Met Phe Val Lys Phe Ile Pro Ile Phe Pro Phe Pro Leu
5 10 15

Gln Phe Tyr Leu Pro Ser Phe Leu Leu Glu 20 25 30

- (2) INFORMATION FOR SEQ ID NO: 466:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 81 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -79..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.7

seq VIGSLLVLTMLTC/RR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 466:

Met His Pro Phe Leu Ala Ala His Gly Pro Ala Phe His Lys Gly Tyr
-75
-70
-65

Lys His Ser Thr Ile Asn Ile Val Asp Ile Tyr Pro Met Met Cys His

Ile Leu Gly Leu Lys Pro His Pro Asn Asn Gly Thr Phe Gly His Thr
-45 -40 -35

Lys Cys Leu Leu Val Asp Gln Trp Cys Ile Asn Leu Pro Glu Ala Ile
-30 -25 -20

Ala Ile Val Ile Gly Ser Leu Leu Val Leu Thr Met Leu Thr Cys Arg
-15 -10 -5 1

Arg

- (2) INFORMATION FOR SEQ ID NO: 467:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.7

seq IWPMSASVATLWS/FT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 467:

Met Ile Trp Pro Met Ser Ala Ser Val Ala Thr Leu Trp Ser Phe Thr
-10 -5 1

Ser Tyr Ile Ser Tyr Pro Ser Arg Phe Tyr Tyr Asp Ala Trp
5 10 15

- (2) INFORMATION FOR SEQ ID NO: 468:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -31..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6

seg LFIYLVFVECLLC/TR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 468:

Met Gly Ile Asp Ile Phe Tyr Pro Ser His Ile Pro Asp Phe His Pro
-30 -25 -20

Ile His Leu Phe Ile Tyr Leu Val Phe Val Glu Cys Leu Leu Cys Thr
-15 -10 -5 1

Arg Asn Xaa Xaa Xaa Leu Ser Xaa Phe Asn Cys Asp Asn Ala Gln Ile
5 10 15

Ile Phe Thr Thr Gly Ser Ser Ser Ser Gly Gly Asn Lys Pro Phe Lys 20 25 30

Ser Ser Leu Cys Thr Val His Arg Gly Gln Glu Arg Glu Arg Ile Glu 35 40 45

Cys Gln Gly Asn Gly

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(2) INFORMATION FOR SEQ ID NO: 469:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 116 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -87..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6 seq LILQASLKGELEA/SQ
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 469:
- Met Lys Glu Leu Asn Gln Lys Leu Thr Asn Lys Asn Asn Lys Ile Glu
 -85 -80 -75
- Asp Leu Glu Gln Glu Ile Lys Ile Gln Lys Gln Lys Gln Glu Thr Leu
 -70 -65 -60
- Gln Glu Glu Ile Thr Ser Leu Gln Ser Ser Val Gln Glu Tyr Glu Glu
 -55 -45 -45
- Lys Asn Xaa Lys Ile Lys Gln Leu Leu Val Lys Thr Lys Lys Glu Leu
 -35 -30 -25
- Ala Asp Ser Lys Gln Ala Glu Thr Asp His Leu Ile Leu Gln Ala Ser
 -20 -15 -10
- Leu Lys Gly Glu Leu Glu Ala Ser Gln Gln Gln Val Glu Val Tyr Lys
 -5 5
- Val Arg Val Leu Leu Phe Lys Ile Lys Lys Met Phe Phe His Val Glu
 10 20 25

Val Arg Asn Gly

(2) INFORMATION FOR SEQ ID NO: 470:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN

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- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -113..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6

seq RLLLCILIIVCYI/LF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 470:

Met Gly Asn Thr Leu Lys Glu Met Gln Asp Val Gln Gly Ala Leu Gln -110 -105 -100

Cys Tyr Thr Arg Ala Ile Gln Ile Asn Pro Ala Phe Ala Asp Ala His
-95 -90 -85

Ser Asn Leu Ala Ser Ile His Lys Asp Ser Gly Asn Ile Pro Glu Ala
-80 -75 -70

Ile Ala Ser Tyr Arg Thr Ala Leu Lys Leu Lys Pro Asp Phe Pro Asp -65 -55 -50

Ala Tyr Cys Asn Leu Ala His Cys Leu Gln Ile Val Cys Asp Trp Thr
-45 -40 -35

Asp Tyr Asp Glu Arg Met Lys Lys Leu Val Ser Ile Val Ala Asp Gln
-30 -25 -20

Leu Glu Lys Asn Arg Leu Leu Cys Ile Leu Ile Ile Val Cys Tyr
-15 -10 -5

Ile Leu Phe Leu Met

- (2) INFORMATION FOR SEQ ID NO: 471:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -39..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6

seq VAYAIPSIPSLFC/QR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 471:

Met Leu Ile Leu Ala Asp Thr Arg Arg Val Gln Gly Gly Thr Leu Gly -35 -30 -25

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Leu Ile Pro Ala Val Leu Asn Arg Val His Val Ala Tyr Ala Ile Pro
-20 -15 -10

Ser Ile Pro Ser Leu Phe Cys Gln Arg Trp
-5

- (2) INFORMATION FOR SEQ ID NO: 472:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 36 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6 seq CVFLFPLISNTSS/YK
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 472:

Met Leu Val Gly Ile Tyr Phe Cys Val Phe Leu Phe Pro Leu Ile Ser -20 -15 -10 -5

Asn Thr Ser Ser Tyr Lys Asn Cys His Lys Thr Leu Gln His Thr Ile

1 5 10

Pro Pro His Gly 15

- (2) INFORMATION FOR SEQ ID NO: 473:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens

(D) DEVELOPMENTAL STAGE: Fetal

(F) TISSUE TYPE: kidney

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

- (B) LOCATION: -42..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 3.5

seq LLLQGACPCLIFL/RP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 473:

Met Phe Leu Ala Pro Ser Leu Leu Ile Thr Lys Leu Leu Thr Gly Ser
-40 -35 -30

Glu Ser Pro Asp Gly Asn Pro Pro Ala Leu Gly Arg Pro Leu Leu Leu -25 -15

Gln Gly Ala Cys Pro Cys Leu Ile Phe Leu Arg Pro Asp Glu Asn Lys
-10 -5 1 5

Lys Glu Gly Xaa Glu Glu Lys Lys Asn His Lys Leu Pro Leu Lys Thr
10 15 20

Ser Leu Gly 25

- (2) INFORMATION FOR SEQ ID NO: 474:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 24 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -18..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5

seg SKSCLFYLOKVSG/IP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 474:

Met Asp Pro Ser Ala Ser Lys Ser Cys Leu Phe Tyr Leu Gln Lys Val -15 -10 -5

Ser Gly Ile Pro Gly Leu Leu Thr

- (2) INFORMATION FOR SEQ ID NO: 475:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -46..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5

seq RWLCLQAYLASFS/LE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 475:

Met Ser Leu Thr Ala Ser Gly Pro Arg Ala Ala Trp Glu Glu Arg Val -45 -35

Gly Gly Leu His Thr Trp Gly Ala Asn Ile Pro Thr Ala Pro Asp Ser
-30 -25 -20 -15

Gln Arg Trp Leu Cys Leu Gln Ala Tyr Leu Ala Ser Phe Ser Leu Glu
-10 -5 1

Ser Pro His Arg Ile Tyr Leu Glu Ser Pro Pro Thr Leu Leu Phe Pro
5 10 15

Pro Pro 20

- (2) INFORMATION FOR SEQ ID NO: 476:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5 seq AQLASPLLPGATP/VA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 476:

Met Lys Tyr Gln Met Val Ser Gly Ser Ala Gln Leu Ala Ser Pro Leu
-20 -15 -10

Leu Pro Gly Ala Thr Pro Val Ala Gly Thr Ile Leu Lys Ser Leu Leu
-5 1 5 10

Leu Arg Thr Val Lys Met Met Arg Val Met
15 20

- (2) INFORMATION FOR SEQ ID NO: 477:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 38 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -35..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5 seq CFWGLMYXWLLLG/SX
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 477:

Met Asn Gly Thr Phe Pro Gly Thr Tyr Val Tyr Leu Val Ala Tyr Gly
-35
-20
-25

Asp Leu Arg Ile Phe Gly Cys Phe Trp Gly Leu Met Tyr Xaa Trp Leu
-15 -10 -5

Leu Leu Gly Ser Xaa Gly

- (2) INFORMATION FOR SEQ ID NO: 478:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 97 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Muscle

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -21..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 12.7 seq ILFLLSWSGPLQG/00
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 478:

Met Gly Pro Ser Thr Pro Leu Leu Ile Leu Phe Leu Leu Ser Trp Ser -20 -15 -10

Gly Pro Leu Gln Gly Gln Gln His His Leu Val Glu Tyr Met Glu Arg
-5 1 5 10

Arg Leu Ala Ala Leu Glu Glu Arg Leu Ala Gln Cys Gln Asp Gln Ser

Ser Arg His Ala Ala Glu Leu Arg Asn Phe Lys Asn Lys Met Leu Pro 30 35 40

Leu Leu Glu Val Ala Glu Lys Glu Arg Glu Ala Leu Arg Thr Glu Ala
45 50 55

Xaa Thr Ile Ser Xaa Gly Val Asp Arg Leu Glu Arg Glu Val Asp Tyr 60 65 70 75

Leu

- (2) INFORMATION FOR SEQ ID NO: 479:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 82 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (3) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 10.5 seq LMLLVSSLSPVQG/VL
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 479:

Met Lys Phe Ile Ser Thr Ser Leu Leu Leu Met Leu Leu Val Ser Ser -20 -15 -10

Leu Ser Pro Val Gln Gly Val Leu Glu Val Tyr Tyr Thr Ser Leu Arg
-5 1 5 10

Cys Arg Cys Val Gln Glu Ser Ser Val Phe Ile Pro Arg Arg Phe Ile
15 20 25

Asp Arg Ile Gln Ile Leu Pro Arg Gly Asn Gly Cys Pro Arg Lys Glu 30 35 40

Ile Ile Val Trp Lys Lys Asn Lys Ser Ile Val Cys Val Asp Leu Lys
45 50 55

His Arg

(2) INFORMATION FOR SEQ ID NO: 480:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 137 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -47..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8 seq VLELLAAVCLVRG/GH
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 480:

Met Asn Tyr Gln Tyr Gly Phe Asn Met Val Met Ser His Pro His Ala
-45 -40 -35

Val Asn Glu Ile Ala Leu Ser Leu Asn Asn Lys Asn Pro Arg Thr Lys
-30
-25
-20

Ala Leu Val Leu Glu Leu Leu Ala Ala Val Cys Leu Val Arg Gly Gly
-15 -5 1

His Glu Ile Ile Leu Ser Ala Phe Asp Asn Phe Lys Glu Val Cys Gly 5 10 15

Glu Lys Gln Arg Phe Glu Lys Leu Met Glu His Phe Arg Asn Glu Asp 20 25 30

Asn Asn Ile Asp Phe Met Val Ala Ser Met Gln Phe Ile Asn Ile Val 35 40 45

Val His Jar Val Glu Asp Met Asn Phe Arg Val His Leu Gln Tyr Glu
50 55 60 65

Phe Thr Lys Leu Gly Leu Xaa Glu Tyr Leu Xaa Lys Leu Lys His Thr 70 75 80

Glu Ser Asp Lys Leu Gln Val Gln Ile 85 90

- (2) INFORMATION FOR SEQ ID NO: 481:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.7 seq LVMCFLSYFGTFA/VE
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 481:
- Met Ala Gln Ser Ile His Met Tyr Ala Ala Arg Val Gln Trp Gly Leu -25 -20 -15
- Val Met Cys Phe Leu Ser Tyr Phe Gly Thr Phe Ala Val Glu Phe Arg -10 -5 l
- His Tyr Arg Tyr Glu Ile Val Cys Ser Glu Tyr Gln Glu Asn Phe Leu 5 10 15 20

Ser Phe Ser Glu Ser Leu Ser Glu Ala Ser Glu Tyr Gln 25 30

- (2) INFORMATION FOR SEQ ID NO: 482:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 88 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1 -
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.1

seq LHLFHLLIRPXQG/WX

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 482:

Met Gly Ser Gly Tyr Ser His Ser Leu His Leu Phe His Leu Leu Ile
-20 -15 -10

Arg Pro Xaa Gln Gly Trp Xaa Xaa Ile Val Pro Ala Cys Phe Trp Arg
-5 1 5 10

Lys Lys Ile Leu Thr Pro Ser Thr Gly Thr Met Glu Leu Leu Gln Val
15 20 25

Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys Ser Ser Asn Ser Thr Gly 30 35 40

Val Leu Glu Ala Ala Asn Asn Ser Leu Val Val Thr Thr Thr Lys Pro
45 50 55

Ser Ile Thr Thr Pro Asn Thr Trp
60 65

- (2) INFORMATION FOR SEQ ID NO: 483:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 69 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.7

seq CFSLVLLLTSIWT/TR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 483:

Met Ala Arg Cys Phe Ser Leu Val Leu Leu Leu Thr Ser Ile Trp Thr
-15 -5

Thr Arg Leu Leu Val Gln Gly Ser Leu Arg Ala Glu Glu Leu Ser Ile
1 5 10 15

Gln Val Ser Cys Arg Ile Met Xaa Xaa Thr Leu Val Ser Lys Lys Ala 20 25 30 Asn Gln Gln Leu Asn Phe Thr Glu Xaa Xaa Gly Gly Xaa Xaa Ala Ala 35 40 . 45

Gly Thr Lys Phe Gly 50

- (2) INFORMATION FOR SEQ ID NO: 484:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 40 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -33..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.7 seq MTCLSVLFGYATS/HP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 484:

Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu Ala Gly Ala Met Leu
-30 -25 -20

Ala Leu Gly Leu Met Thr Cys Leu Ser Val Leu Phe Gly Tyr Ala Thr -15 -10 -5

Ser His Pro Gln Gly Leu Tyr Ile

- (2) INFORMATION FOR SEQ ID NO: 485:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -26..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix

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(D) OTHER INFORMATION: score 6.3

seq RQLLLPLPPFSFP/AP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 485:

Met Pro Gln Gln Pro Val Glu Gln Gly Ser Pro Leu Leu Arg Gln Leu -25 -15

Leu Leu Pro Leu Pro Pro Phe Ser Phe Pro Ala Pro Ser Pro Cys Pro -10 -5 1 5

Ser Trp Pro Val Ala Leu Gly Ser His Gly Val Ala Tyr Trp Gly Ser 10 15 20

Cys Ser Leu Gly His 25

- (2) INFORMATION FOR SEQ ID NO: 486:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 90 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -80..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.2

seq RASLLPMLLGSWA/FL

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 486:

Met Pro Ser Arg Ser Pro Phe Thr Trp Ser His Leu Cys Trp Arg Ala
-80 -75 -70 -65

Gly Arg Cys Pro Arg Trp Arg Ala Cys Leu Ser Ser Ser Ser Val Arg
-60 -55 -50

Met Cys Ser Pro Ala Ala Pro Ser Arg Phe Gly Ala Leu Gly Xaa Ser
-45 -40 -35

Ala Arg Arg Trp Pro Arg Arg Asp Ala Asp Thr Trp Cys Ala Pro Gln
-30 -25 -20

Gly Val Met Arg Ala Ser Leu Leu Pro Met Leu Leu Gly Ser Trp Ala -15 -5

Phe Leu Pro Pro Ser Cys Ser Pro Arg Ala 1 5 10

(2) INFORMATION FOR SEQ ID NO: 487:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -40..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6

seq LTYGIILTHGASG/DM

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 487:

Met Ser His Thr Glu Val Lys Leu Lys Ile Pro Phe Gly Asn Lys Leu
-40 -35 -30 -30

Leu Asp Ala Val Cys Leu Val Pro Asn Lys Ser Leu Thr Tyr Gly Ile
-20 -15 -10

Ile Leu Thr His Gly Ala Ser Gly Asp Met Asn Leu Pro His Leu Met
-5 1 5

Ser Leu Ala Ser His Leu Ala Ser His Gly Phe Phe Cys Leu Arg Phe
10 15 20

Thr Cys Lys Gly Leu Asn Ile Val His Arg Ile Lys Ala Tyr Lys Ser 25 30 35 40

Val Leu Asn Tyr Leu Lys Thr Ser Gly Xaa Tyr Lys Leu Ala Gly
45 50 55

- (2) INFORMATION FOR SEQ ID NO: 488:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 76 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:

(A) NAME/KEY: sig_peptide

- (B) LOCATION: -40..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 6 seq LCXEFXSVASCDA/AV
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 488:

Met Glu Leu Gly Ser Cys Leu Glu Gly Gly Arg Glu Ala Ala Glu Glu -40 -35 -30 -25

Glu Gly Glu Pro Glu Val Lys Lys Arg Arg Leu Leu Cys Xaa Glu Phe
-20 -15 -10

Xaa Ser Val Ala Ser Cys Asp Ala Ala Val Ala Gln Cys Phe Leu Ala
-5 1 5

Xaa Asn Asp Trp Glu Met Glu Arg Ala Leu Asn Ser Tyr Phe Glu Pro 10 15 20

Pro Val Glu Glu Ser Ala Leu Glu Arg Arg Pro Xaa 25 30 35

- (2) INFORMATION FOR SEQ ID NO: 489:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 57 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -36..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.8 seq AFVSGLLIGQCSS/QK
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 489:

Met Gly Arg Thr Tyr Ile Val Glu Glu Thr Val Gly Gln Tyr Leu Ser
-35 -30 -25

Asn Ile Asn Leu Gln Gly Lys Ala Phe Val Ser Gly Leu Leu Ile Gly -20 -15 -10 -5

Gln Cys Ser Ser Gln Lys Asp Tyr Val Ile Leu Ala Thr Arg Thr Pro 1 5 10

Pro Lys Glu Glu Gln Ser Glu Asn Leu 15 20

(2) INFORMATION FOR SEQ ID NO: 490:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 122 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.6 seq CLSCLLIPLALWS/II
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 490:
- Met Gly Ser Arg Lys Cys Gly Gly Cys Leu Ser Cys Leu Leu Ile Pro
- Leu Ala Leu Trp Ser Ile Ile Val Asn Ile Leu Leu Tyr Phe Pro Asn -5 1 5 10
- Gly Gln Thr Ser Tyr Ala Ser Ser Asn Lys Leu Thr Asn Tyr Val Trp
 15 20 25
- Tyr Phe Glu Gly Ile Cys Phe Ser Gly Ile Met Met Leu Ile Val Thr
 30 35
- Thr Val Leu Clu Glu Asn Asn Asn Tyr Lys Cys Cys Gln
 45 50 55
- Ser Glu Asn Cys Ser Lys Lys Tyr Val Thr Leu Leu Ser Ile Ile Phe 60 65 70 75
- Ser Ser Leu Gly Ile Ala Phe Ser Gly Tyr Cys Leu Val Ile Ser Ala 80 85 90
- Leu Gly Leu Val Gln Gly Pro Tyr Cys Arg 95 100
- (2) INFORMATION FOR SEQ ID NO: 491:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 150 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

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- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.6

seq CLSCLLIPLALWS/II

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 491:

Met Gly Ser Arg Lys Cys Gly Gly Cys Leu Ser Cys Leu Leu Ile Pro

Leu Ala Leu Trp Ser Ile Ile Val Asn Ile Leu Leu Tyr Phe Pro Asn

Gly Gln Thr Ser Tyr Ala Ser Ser Asn Lys Leu Thr Asn Tyr Val Trp

Tyr Phe Glu Gly Ile Cys Phe Ser Gly Ile Met Met Leu Ile Val Thr 35

Thr Val Leu Leu Val Leu Glu Asn Asn Asn Asn Tyr Lys Cys Gln 45

Ser Glu Asn Cys Ser Lys Lys Tyr Val Thr Leu Leu Ser Ile Ile Phe

Ser Ser Leu Gly Ile Ala Phe Ser Gly Tyr Cys Leu Val Ile Ser Ala

Leu Gly Leu Val Gln Gly Pro Tyr Cys Arg Thr Leu Asp Gly Trp Glu 95 100

Tyr Ala Phe Glu Gly Thr Xaa Gly Arg Phe Leu Thr Asp Ser Ser Ile 110 115

Trp Ile Gln Cys Leu Glu 125

- (2) INFORMATION FOR SEQ ID NO: 492:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 36 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig peptide
- (B) LOCATION: -21..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.5

seq SFLPSALVIWTSA/AF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 492:

Met Trp Trp Phe Gln Gln Gly Leu Ser Phe Leu Pro Ser Ala Leu Val
-20 -15 -10

Ile Trp Thr Ser Ala Ala Phe Ile Phe Ser Tyr Ile Thr Ala Val Thr
-5
1 5 10

Leu His His Ile 15

- (2) INFORMATION FOR SEQ ID NO: 493:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 59 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -41..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.4

seq PLIFSLWCSGVLL/HI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 493:

Met Phe Asn Ala Ser Thr Phe Thr Asp Trp Ser Ser Ser Ile Phe Phe -40 -35 -30

Val Phe Thr Phe Lys Ser Lys Lys Ser Ala Gly Leu Pro Leu Ile Phe -25 -10 -15

Ser Leu Trp Cys Ser Gly Val Leu Leu His Ile His Gln Lys Ala Gly
-5

Gly Pro Arg Leu Trp Arg Ile His Gly Glu Gln
10 15

(2) INFORMATION FOR SEQ ID NO: 494:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 37 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -29..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 13.4

seq SLLLVQLLTPCSA/QF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 494:

Met Lys Met Ala Ser Ser Leu Ala Phe Leu Leu Leu Asn Phe His Val

Ser Leu Leu Val Gln Leu Leu Thr Pro Cys Ser Ala Gln Phe Ser -10 -5 1

Val Leu Gly Pro Leu 5

- (2) INFORMATION FOR SEQ ID NO: 495:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 47 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -42..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2 seq LLFDLVCHEFCQS/DD

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 495:

Met His Ile Leu Gln Leu Leu Thr Thr Val Asp Asp Gly Ile Gln Ala -40 -35 -30

Ile Val His Cys Pro Asp Thr Gly Lys Asp Ile Trp Asn Leu Leu Phe
-25
-15

Asp Leu Val Cys His Glu Phe Cys Gln Ser Asp Asp Pro Ala Arg
-10 -5 1 5

- (2) INFORMATION FOR SEQ ID NO: 496:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -43..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.2

seq PMQLLQVLSDVLA/EI

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 496:
- Met Ser Asp Gln Ile Lys Phe Ile Met Asp Ser Leu Asn Lys Glu Pro
 -40 -35 -30
- Phe Arg Lys Asn Tyr Asn Leu Ile Thr Phe Xaa Ser Leu Glu Pro Met
 -25 -20 -15
- Gln Leu Leu Gln Val Leu Ser Asp Val Leu Ala Glu Ile Asp Pro Lys
 -10 -5 1 5
- Gin Leu Val Asp Ile Arg Glu Glu Met Pro Glu Gln Thr Ala Lys Arg
 10 15 20
- Met Leu Ser Leu Leu Gly Ile Leu Lys Tyr Lys Pro Ser Gly Asn Ala
 25 30 35
- Thr Asp Met Ser Thr Phe Arg Gln Gly Leu Val Ile Gly Ser Lys Pro 40 45 50

Val Ile Tyr Pro Val Leu 55

- (2) INFORMATION FOR SEQ ID NO: 497:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 93 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR

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(ii) MOLECULE TYPE: PROTEIN

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -79..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 4.6

seq IIHAXGLVRECLA/XT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 497:

Met Ala Thr Ser Ser Gln Xaa Arg Gln Leu Leu Ser Asp Tyr Gly Pro -75

Pro Ser Leu Gly Tyr Thr Gln Gly Thr Gly Asn Ser Gln Xaa Pro Gln

Ser Lys Tyr Ala Glu Leu Leu Ala Ile Ile Xaa Glu Leu Gly Lys Glu -45 -40

Ile Arg Pro Met Tyr Ala Gly Ser Lys Ser Ala Met Glu Arg Leu Lys

Arg Gly Ile Ile His Ala Xaa Gly Leu Val Arg Glu Cys Leu Ala Xaa -10

Thr Glu Arg Met Pro Asp Pro Ser Cys Leu Val Gly Phe 5

(2) INFORMATION FOR SEQ ID NO: 498:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 59 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -15..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.5 seq LLGAAAVAALGRG/RA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 498:

Met Arg Leu Leu Gly Ala Ala Ala Val Ala Ala Leu Gly Arg Gly Arg

Ala Pro Ala Ser Leu Gly Trp Gln Arg Lys Gln Val Asn Trp Lys Ala $\frac{5}{10}$ 15

Cys Arg Trp Ser Ser Ser Gly Val Ile Pro Asn Glu Lys Ile Arg Asn 20 25 30

Ile Gly Ile Ser Ala His Ile Asp Ser Gly Lys
35 40

(2) INFORMATION FOR SEQ ID NO: 499:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.5 seq RLLLRRFLASVIS/RK
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 499:

Met Ala Gln Arg Leu Leu Leu Arg Arg Phe Leu Ala Ser Val Ile Ser -15 -5

Arg Lys Pro Ser Gln Gly Gln Trp Pro Pro Leu Thr Ser Arg Ala Leu
1 5 10

Gln Thr Pro Gln Cys Ser Pro Gly Gly Leu Thr Val Thr Pro Asn Pro 20 25 30

Ala Pro Gly 35

- (2) INFORMATION FOR SEQ ID NO: 500:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 32 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

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- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.4

seq LNSLSALAELAVG/SR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 500:

Met Phe Arg Leu Asn Ser Leu Ser Ala Leu Ala Glu Leu Ala Val Gly
-15 -5

Ser Arg Trp Tyr His Gly Gly Ser Gln Pro Ile Gln Ile Arg Leu Ala 1 5 10 15

- (2) INFORMATION FOR SEQ ID NO: 501:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 90 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -61..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq YTAVSVLAGPRWA/DP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 501:

Met Ser Gly Ser Asn Gly Ser Lys Glu Asn Ser His Asn Lys Ala Arg
-60 -55 -50

Thr Ser Pro Tyr Pro Gly Ser Lys Val Glu Arg Ser Gln Val Pro Asn
-45 -40 -35 -30

Glu Lys Val Gly Trp Leu Val Glu Trp Gln Asp Tyr Lys Pro Val Glu
-25
-20
-15

Tyr Thr Ala Val Ser Val Leu Ala Gly Pro Arg Trp Ala Asp Pro Gln
-10 -5 l

Ile Ser Glu Ser Asn Phe Ser Pro Lys Phe Asn Glu Lys Asp Gly His
5 10 15

Val Glu Arg Lys Ser Lys Asn Gly Leu Tyr 20 25 .

- (2) INFORMATION FOR SEQ ID NO: 502:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 21 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5 seq TLMFSLTAQWXTS/RS
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 502:

Met Arg Thr Thr Leu Met Phe Ser Leu Thr Ala Gln Trp Xaa Thr Ser -15 -5

Arg Ser Ser Phe Gln

- (2) INFORMATION FOR SEQ ID NO: 503:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 14.1 seq LTLLLLLTLLAFA/GY
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 503:

Met Ser Asp Leu Leu Leu Gly Leu Ile Gly Gly Leu Thr Leu Leu
-25 -15 -10

Leu Leu Thr Leu Leu Ala Phe Ala Gly Tyr Ser Gly Leu Leu Ala
-5 1 5

Gly Val Glu Val Ser Ala Gly Ser Pro Pro Ile Arg Asn Val Thr Val

Ala Tyr Lys Phe His Met Gly Leu Tyr Gly Glu Thr Gly Arg Leu Phe 25 30 35

Thr Glu Ser Cys Ser Ile Ser Pro Lys Leu Arg Ser Ile Ala Val Tyr 40 45 50 55

Tyr Asp Asn Pro His Met Val Pro Pro Asp Lys Cys Arg Cys Ala Val 60 65 70

Gly Ser Ile Leu Ser Glu Gly Glu
75

(2) INFORMATION FOR SEQ ID NO: 504:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 78 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -32..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 11.4

seq LWSLALWLPLALS/VS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 504:

Met Glu Gly Thr Glu Met Gly Ala Arg Pro Gly Gly His Pro Xaa Lys
-30 -25 -20

Trp Ser Phe Leu Trp Ser Leu Ala Leu Trp Leu Pro Leu Ala Leu Ser
-15 -5

Val Ser Leu Phe Leu Gly Leu Ser Leu Ser Pro Pro Gln Pro Gly Leu
1 5 10 15

Ser Leu Tro Cys Thr Leu Ser Tyr Cys Cys Glu Gln Trp Lys Phe Lys
20 25 30

Gly Thr Pro Ser Pro Ala Leu Leu Asn Leu Gly Thr Arg Gly
35 40 45

- (2) INFORMATION FOR SEQ ID NO: 505:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 86 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -55..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 11.2

seq LLFALGSLGLIFA/LI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 505:

Met Xaa Phe Leu Arg Lys Val Xaa Ser Ile Leu Ser Leu Gln Val Leu
-55 -50 -45 -45

Leu Thr Thr Val Thr Ser Thr Val Phe Leu Tyr Phe Glu Ser Val Arg
-35
-30
-25

Thr Phe Val Xaa Glu Ser Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly
-20 -15 -10

Ser Leu Gly Leu Ile Phe Ala Leu Ile Leu Asn Xaa His Lys Tyr Pro
-5 1 5

Leu Asn Leu Tyr Leu Leu Phe Gly Phe Thr Leu Leu Xaa Ala Leu Thr 10 15 20 25

Val Ala Val Val Thr
30

- (2) INFORMATION FOR SEQ ID NO: 506:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 45 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide

- (B) LOCATION: -38..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 10.8 seq MLLLLLLLGSGQG/PQ
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 506:

Met Ala Ala Thr Leu Gly Pro Leu Gly Ser Trp Gln Gln Trp Arg Arg
-35 -30 -25

Cys Leu Ser Ala Arg Asp Gly Ser Arg Met Leu Leu Leu Leu Leu Leu Leu -20 -15 -10

Leu Gly Ser Gly Gln Gly Pro Gln Gln Val Gly Ala Gly
-5 1 5

- (2) INFORMATION FOR SEQ ID NO: 507:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -41..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.9 seq ILPFLLFPFPVNA/RS
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 507:

Met Ser Ser Trp Met Tyr Leu Gly Tyr Pro Ile Val Thr Ser Asn Thr
-40 -35 -30

Thr Cys Leu Lys Leu Ile Ser Ser Ser Phe Pro Gln Ile Leu Pro Phe
-25 -15 -10

Leu Leu Phe Pro Phe Pro Val Asn Ala Arg Ser His Xaa Val Ala Gln
-5 1 5

Thr Lys Ser Pro Arg

- (2) INFORMATION FOR SEQ ID NO: 508:
 - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 38 amino acids

(B) TYPE: AMINO ACID
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: PROTEIN

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Homo Sapiens

(F) TISSUE TYPE: Dystrophic muscle

(ix) FEATURE:

(A) NAME/KEY: sig_peptide

(B) LOCATION: -21..-1

- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 9.7

seq QLCLLLLPSCSLS/VS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 508:

Met Ala Pro Gly Val Ile Ile Gln Leu Cys Leu Leu Leu Pro
-20 -15 -10

Ser Cys Ser Leu Ser Val Ser Gly Cys Ser Cys Pro Ser Ala Cys Phe
-5 1 5 10

Ser Thr Thr Ser Arg Glu
15

- (2) INFORMATION FOR SEQ ID NO: 509:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 110 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -93..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.6

seq LSLSLGASAPVQC/QQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 509:

Met Arg His Gly Phe Ile Gln Gln Gln Phe Ser Leu Thr Ala Phe Ser
-90 -85 -80

Xaa Xaa Xaa Ile Phe Thr Leu Xaa Xaa Leu Ser Gln Leu Leu Ser
-75 -70 -65

Ser Ala Ala Pro Lys His Thr Ala Ala Pro Thr Ala Leu Pro Cys Leu

-60 **-**55 **-**50

Gln Gly Gln Gln Leu Asn Ser Leu Ser Leu Gly Thr Ser Glu Leu Ser
-45 -35 -30

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Cys Val Leu Ala Ser Ser Cys Leu Ser Thr Lys Thr Asp Pro Ser Gly
-25
-20
-15

Leu Ser Leu Gly Ala Ser Ala Pro Val Gln Cys Gln Gln Asp
-10 -5 1

Asn Tyr Thr Phe Cys Xaa Gln Tyr Trp Leu Arg Ala Arg His
5 10 15

(2) INFORMATION FOR SEQ ID NO: 510:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -41..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.5 seg LIIFLSFLPFINS/SF
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 510:

Met Phe Gln Asn Ile Gln Lys Cys Leu Asn Val Pro Phe Val Arg Gly
-40 -35 -30

Tyr His Val Phe Tyr Ile Asn Leu Asn Ala Val Ile Leu Ile Ile Phe -25 -20 -15

Leu Ser Phe Leu Pro Phe Ile Asn Ser Ser Phe Val Tyr Lys Thr Asn
-5

Pro Leu Tyr Asp Ala Ile Ser Asn Tyr Val Phe Ser Phe Arg Tyr Pro 10 15 20

Asn Leu Xaa Xaa Phe Ala Leu Asp Val Arg Leu Val Phe 25 30 35

(2) INFORMATION FOR SEQ ID NO: 511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 27 amino acids

(B) TYPE: AMINO ACID(D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 9.2

seq FPVLALFLSGSLA/LF

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 511:

Met Ser Leu Ser Gln Arg Gly Phe Pro Val Leu Ala Leu Phe Leu Ser -20 -15 -10 -5

Gly Ser Leu Ala Leu Phe His His Thr Ser Gly
1 5

- (2) INFORMATION FOR SEQ ID NO: 512:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 70 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -29..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.9 seq ALLIVCDVPSASA/QR

.

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 512:

Met Ala Ala Arg Trp Arg Phe Trp Cys Val Ser Val Thr Met Val Val -25 -20 -15

Ala Leu Leu Ile Val Cys Asp Val Pro Ser Ala Ser Ala Gln Arg Lys
-10 -5 1

Lys Glu Met Val Leu Ser Glu Lys Val Ser Gln Leu Met Glu Trp Thr 5 10 15

Asn Lys Arg Pro Val Ile Arg Met Asn Gly Asp Lys Phe Arg Arg Leu 20 25 30 35

Val Lys Xaa Pro Pro Arg *40

- (2) INFORMATION FOR SEQ ID NO: 513:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 46 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -32..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.8 seq VPMLLLIVGGSFG/LR
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 513:
- Met Phe Ala Pro Ala Val Met Arg Ala Phe Arg Lys Asn Lys Thr Leu -30 -25 -20
- Gly Tyr Gly Val Pro Met Leu Leu Leu Ile Val Gly Gly Ser Phe Gly -15 -5
- Leu Arg Glu Phe Ser Xaa Ile Arg Tyr Asp Ala Val Lys Gly
 1 5 10
- (2) INFORMATION FOR SEQ ID NO: 514:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -37..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.5

seq LLVLLLYAPVGFC/LL

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 514:
- Met Glu Leu Pro Ser Gly Pro Gly Pro Glu Arg Leu Phe Asp Ser His
 -35
 -30
 -25
- Arg Leu Pro Gly Asp Cys Phe Leu Leu Leu Val Leu Leu Leu Tyr Ala
 -20 -15 -10
- Pro Val Gly Phe Cys Leu Leu Val Leu Xaa Leu Phe Leu Gly Ile His
 -5 1 5 10
- Val Phe Leu Val Ser Cys Ala Leu Pro Asp Ser Val Leu Arg Arg Phe
 15 20 25
- Val Val Arg Thr Met Cys Ala Val Leu Gly Leu Val Ala Arg Gln Glu 30 35 40
- Asp Ser Gly Leu Arg Asp His Ser Val Arg Val Leu Ile Ser Asn His 45 50 55
- Val Thr Pro Phe Asp His Gln 60 65
- (2) INFORMATION FOR SEQ ID NO: 515:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -90..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.4

seq SLVLLTVTPSXRQ/QE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 515:

Met Ala Gln Ser Gln Gly Trp Val Xaa Arg Tyr Xaa Lys Ala Phe Cys -90 -85 -80 -75

Lys Gly Phe Phe Val Ala Val Pro Val Ala Val Thr Phe Leu Asp Arg
-70 -65 -60

Val Ala Cys Val Ala Arg Val Glu Gly Ala Ser Met Gln Pro Ser Leu
-55 -50 -45

Asn Pro Gly Gly Ser Xaa Ser Ser Asp Val Val Xaa Xaa Asn His Trp
-40 -35 -30

Lys Val Arg Asn Phe Glu Val His Arg Gly Asp Ile Val Ser Leu Val -25 -20 -15

Leu Leu Thr Val Thr Pro Ser Xaa Arg Gln Glu -10 -5 1

- (2) INFORMATION FOR SEQ ID NO: 516:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8.1

seq WLLVLSFVFGCNV/LR

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 516:
- Met Ser Ser Ala Ala Ala Asp His Trp Ala Trp Leu Leu Val Leu Ser -20 -15 -10
- Phe Val Phe Gly Cys Asn Val Leu Arg Ile Leu Xaa Pro Xaa Xaa Xaa -5
- Ile Xaa Xaa Val Gln Gly Ala Ala Glu Gly Arg Gly Xaa Glu Ser Gln 10 20 25
- Met Arg Ala Glu Ile Gln Asp Met Lys Gln Glu Leu Ser Thr Val Asn 30 35 40
- Met Met Asp Glu Phe Ala Arg Tyr Ala Arg Leu Xaa Arg Lys Ile Asn 45 50 55

Lys Met Thr Asp Lys 60

- (2) INFORMATION FOR SEQ ID NO: 517:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 34 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR

- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 8

seq HVFFLLLLAHIIA/LE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 517:

Met Asn Leu Phe Lys Thr Asn His Val Phe Phe Leu Leu Leu Leu Ala -20 -15 -10 -5

His Ile Ile Ala Leu Glu Ser Ile Ala Trp Phe Thr Val Phe Tyr Phe 1 5 10

Gly Asn

- (2) INFORMATION FOR SEQ ID NO: 518:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 43 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.9

seq LLLPRVLLTMASG/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 518:

Met Pro Ala Leu Leu Pro Val Ala Ser Arg Leu Leu Leu Pro Arg
-20 -15 -10

Val Leu Leu Thr Met Ala Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro
-5 1 5

Ala Ser Asp Ser Gly Ser Gly Tyr Val Pro Gly
10 15

- (2) INFORMATION FOR SEQ ID NO: 519:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 96 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -66..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.9

seq LLLPRVLLTMASG/SP

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 519:
- Met Ile Gly Ser Gly Leu Ala Gly Ser Gly Gly Ala Gly Gly Pro Ser
 -65 -60 -55
- Ser Thr Val Thr Trp Cys Ala Leu Phe Ser Asn His Val Ala Ala Thr
 -50 -45 -40 -35
- Gln Ala Ser Leu Leu Ser Phe Val Trp Met Pro Ala Leu Leu Pro
- Val Ala Ser Arg Leu Leu Leu Leu Pro Arg Val Leu Leu Thr Met Ala -15 -10 -5
- Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro Ala Ser Asp Ser Gly Ser 1 5 10
- Gly Tyr Val Pro Gly Ser Val Ser Ala Ala Phe Val Thr Cys Pro Arg
 15 20 25 30
- (2) INFORMATION FOR SEQ ID NO: 520:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide

- (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.9 seq LLLPRVLLTMASG/SP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 520:

Met Pro Ala Leu Leu Pro Val Ala Ser Arg Leu Leu Leu Pro Arg
-20 -15 -10

Val Leu Leu Thr Met Ala Ser Gly Ser Pro Pro Thr Gln Pro Ser Pro
-5 1 5

Ala Ser Asp Ser Gly Ser Gly Tyr Val Pro Gly Ser Val Ser Ala Ala 10 15 20

Phe Val Thr Cys Pro Asn Glu Lys Val Ala Lys Glu Ile Ala Arg Ala 25 30 35 40

Val Val Glu Lys Arg Leu Ala Ala Cys Val Asn Leu Ile Pro Gln Ile 45 50 55

Thr Ser Ile Tyr Glu Trp Lys Gly Xaa Ile Glu Glu Asp Ser Glu Val 60 65 70

Leu Met Met Ile Lys Thr Gln Ala 75 80

- (2) INFORMATION FOR SEQ ID NO: 521:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 121 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -92..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.6 seq FLLLTVALLASYS/VH
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 521:

Met Glu Ala Ser Trp Gly Ser Phe Asn Ala Glu Arg Gly Trp Tyr Val

Ser Val Gln Gln Pro Glu Glu Ala Glu Ala Glu Glu Leu Ser Pro Leu
-75 -65

Leu Ser Asn Glu Leu His Arg Gln Arg Ser Pro Gly Val Ser Phe Gly
-60 -55 -50 -45

Leu Ser Val Phe Asn Leu Met Asn Ala Ile Met Gly Ser Gly Ile Leu
-40 -35 -30

Gly Leu Ala Tyr Val Met Ala Asn Thr Gly Val Phe Gly Phe Ser Phe
-25 -20 -15

Leu Leu Leu Thr Val Ala Leu Leu Ala Ser Tyr Ser Val His Leu Leu -10 -5 1

Leu Ser Met Cys Ile Gln Thr Ala Val Thr Ser Tyr Glu Asp Leu Gly
5 10 15 20

Leu Phe Ala Phe Gly Leu Pro Gly Leu
25

- (2) INFORMATION FOR SEQ ID NO: 522:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 19 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.6 seq FFLLLRFFLRIDG/VP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 522:

Met Pro Ser Ser Phe Phe Leu Leu Leu Arg Phe Phe Leu Arg Ile Asp

Gly Val Pro 1

- (2) INFORMATION FOR SEQ ID NO: 523:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 46 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:

- (A) ORGANISM: Homo Sapiens
- (F) TISSUE TYPE: Dystrophic muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -19..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.6 seq FIVGIYFLSSCRA/EE
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 523:

Met Lys Arg Thr His Leu Phe Ile Val Gly Ile Tyr Phe Leu Ser Ser
-15 -10 -5

Cys Arg Ala Glu Glu Gly Leu Asn Phe Pro Thr Tyr Asp Gly Lys Asp
1 5 10

Arg Val Val Ser Leu Ser Glu Lys Asn Phe Lys Gln Val Leu 15 20 25

- (2) INFORMATION FOR SEQ ID NO: 524:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.4 seq VLLLAALPPVLLP/GA
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 524:

Met Gly Asp Lys Ile Trp Leu Pro Phe Pro Val Leu Leu Leu Ala Ala
-20 -15 -10

Leu Pro Pro Val Leu Leu Pro Gly Ala Ala Gly Phe Thr Pro Ser Leu
-5 1 5

Asp Ser Asp Phe Thr Phe Thr Leu Pro Ala Gly Gln Lys Glu Cys Phe 10 15 20 25

Tyr Gln Pro Met Pro Leu Xaa Ala Ser Leu Glu Ile Glu 30 35

- (2) INFORMATION FOR SEQ ID NO: 525:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 57 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -37..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.3

seq LLSACLVTLWGLG/EP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 525:

Met Pro His Ser Ser Leu His Pro Ser Ile Pro Cys Pro Arg Gly His
-35 -30 -25

Gly Ala Gln Lys Ala Ala Leu Val Leu Leu Ser Ala Cys Leu Val Thr
-20 -15 -10

Leu Trp Gly Leu Gly Glu Pro Pro Glu His Thr Leu Arg Tyr Leu Val -5 1 5 10

Leu Xaa Leu Ala Ser Leu Gln Leu Gly
15 20

- (2) INFORMATION FOR SEQ ID NO: 526:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -29..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.3
 - seq HLLLLLLPAPTLK/GL
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 526:

Met Gly Ala Trp Gly Arg Gly Trp Pro Trp Glu Glu Arg Gln Gly His
-25 -20 -15

His Leu Leu Leu Leu Leu Pro Ala Pro Thr Leu Lys Gly Leu Gly
-10 -5 1

Ala Ala Gln Leu Pro Leu Cys Pro Ser Gly Gly Leu Ser Pro Leu Leu 5 10 15

Thr Leu Leu Gln Ser Gly 20 25

- (2) INFORMATION FOR SEQ ID NO: 527:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 124 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -75..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7.2 seq LLFIIGLIGCCAT/IR
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 527:

Met Gly Gln Cys Gly Ile Thr Ser Ser Lys Thr Val Leu Val Phe Leu
-75 -65 -60

Asn Leu Ile Phe Trp Gly Ala Ala Gly Ile Leu Cys Tyr Val Gly Ala
-55 -50 -45

Tyr Val Phe Ile Thr Tyr Asp Asp Tyr Asp His Phe Phe Glu Asp Val -40 -35 -30

Tyr Thr Leu Ile Pro Ala Val Val Ile Ile Ala Val Arg Ala Leu Leu
-25 -20 -15

Phe Ile Ile Gly Leu Ile Gly Cys Cys Ala Thr Ile Arg Glu Ser Arg
-10 -5 1 5

Cys Gly Leu Ala Thr Phe Val Ile Ile Leu Leu Leu Val Phe Val Thr 10 15 20

Glu Val Val Val Val Leu Gly Tyr Val Tyr Arg Ala Lys Val Glu 25 30 35

Asn Glu Val Asp Arg Ser Ile Gln Lys Val Tyr Lys
40
45

- (2) INFORMATION FOR SEQ ID NO: 528:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -65..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 7

seq IGHFLCLVILVYC/AE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 528:

Met Pro Xaa Ala Phe Ser Val Ser Ser Phe Pro Val Ser Ile Pro Ala -65 -55

Val Leu Thr Gln Thr Asp Trp Thr Glu Pro Trp Leu Met Gly Leu Ala -40

Thr Phe His Ala Leu Cys Val Leu Leu Thr Cys Leu Ser Ser Arg Ser -30

Tyr Arg Leu Gln Ile Gly His Phe Leu Cys Leu Val Ile Leu Val Tyr

Cys Ala Glu Tyr'Ile Asn Glu Ala Ala Ala Met Asn Trp Arg Leu Phe 1 5 10

Ser Xaa Tyr Gln Tyr Phe Asp Ser Arg Gly Met Phe Ile Ser Ile Val

Phe Ser Ala Pro Leu Leu Val Asn Ala Met Ile Ile Val Val Met Trp 40

Val Trp Lys

50

- (2) INFORMATION FOR SEQ ID NO: 529:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 26 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.7

seq LLLSLFFPLRISL/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 529:

Met Leu Leu Ser Leu Phe Phe Pro Leu Arg Ile Ser Leu Ser Pro -10 -5 1

Ser Asn His Leu Trp Ser Ala Ser Ser Gly
5 10

- (2) INFORMATION FOR SEQ ID NO: 530:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 80 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -23..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.6

seq LILVLQLLLRIRR/NR

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 530:

Met Glu Thr Gly Glu Arg Ala Arg Leu Ile Leu Ile Leu Val Leu Gln
-20 -15 -10

Leu Leu Arg Ile Arg Arg Asn Arg Gln Gln Arg Cys Xaa Ala Ser
-5 1 5

Ser Ala Thr Ala Pro Ser Ser His Gly Cys Asp Leu Arg Gly Gly Lys
10 20 25

Leu Asn Phe Lys Thr Thr Pro Met Asp Ala Asp Ser Asp Val Ala Leu 30 35 40

Asp Ile Leu Ile Thr Asn Val Val Cys Val Phe Arg Thr Arg Cys Arg

45

50

55

- (2) INFORMATION FOR SEQ ID NO: 531:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 66 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -41..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.4

seq ILGCSSVCQLCTG/RQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 531:

Met Cys Gly Xaa Xaa Phe Ser Leu Pro Cys Leu Arg Leu Phe Leu Val -40 -35 -30

Val Thr Cys Tyr Xaa Leu Leu Leu Leu His Lys Glu Ile Leu Gly Cys
-25 -15 -10

Ser Ser Val Cys Gln Leu Cys Thr Gly Arg Gln Ile Asn Cys Arg Asn -5 1 5

Leu Gly Leu Ser Ser Ile Leu Arg Ile Phe Leu Lys Val Gln Phe Phe 10 15 20

Cys Ile 25

- (2) INFORMATION FOR SEQ ID NO: 532:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 119 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide

- (B) LOCATION: -73..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.4 seq ACCFLSAFSPTLT/KS
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 532:

Met Asn Pro Val Thr Glu Ser Pro Ser Cys Leu Phe Ser Pro Pro Ser -70 -60

Glu Ser Ala Leu Ala Ser Gln Leu Ala Leu Ser Ala Ser Cys Asp Gln
-55 -50 -45

Arg Ala Pro Phe Ser Leu Ala Gly Val Xaa Ser Xaa Xaa Pro Arg Leu
-40 -35 -30

Ala Ser Arg Gln Val Ala Pro Pro Phe Gly Ser Arg Ala Cys Cys Phe -25 -15 -10

Leu Ser Ala Phe Ser Pro Thr Leu Thr Lys Ser Ala Ala Ala Thr Ser
-5 1 5

Thr Ala His Thr Phe Leu Ala Asn Gln Leu Ser Cys Leu Phe Thr Lys
10 15 20

Cys Leu His Asn Asn Tyr Ser Ser Ser Leu Arg Leu Thr Lys Lys Gln 25 30 35

Glu Lys Ser Thr Thr Pro Gln
40
45

- (2) INFORMATION FOR SEQ ID NO: 533:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.3 seq LGLSVLLTAATVA/GV
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 533:

Met Ser Arg Ser Ser Lys Val Val Leu Gly Leu Ser Val Leu Leu Thr
-20 -15 -10

Ala Ala Thr Val Ala Gly Val His Val Lys Gln Gln Trp Asp

5

-5

1

(2) INFORMATION FOR SEQ ID NO: 534:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -26..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.3

seq GVGLVTLLGLAVG/SY

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 534:

Met Gly Ile Gln Thr Ser Pro Val Leu Leu Ala Ser Leu Gly Val Gly
-25 -20 -15

Leu Val Thr Leu Leu Gly Leu Ala Val Gly Ser Tyr Leu Val Arg Arg -10 -5 1 5

Ser Arg Arg Pro Gln Val Thr Leu Leu Asp Pro Ser Glu Lys Tyr Leu 10 15 20

Leu Arg Leu Leu Asp Lys Thr Thr Pro Gly
25 30

- (2) INFORMATION FOR SEQ ID NO: 535:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -51..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.2

seq VLLLSSAXLVXXS/SP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 535:

Met Tyr Pro Ser Tyr Leu Leu Ile Xaa Pro Pro Ile Pro Ser Gln Phe -50 -45 -40

Leu Lys Gln Cys Xaa Pro Pro Thr Leu Ser Asp Pro Phe Leu Pro Leu -35 -20 -25

Ala Leu Arg Ser Leu Asp Val Leu Leu Leu Ser Ser Ala Xaa Leu Val

Xaa Xaa Ser Ser Pro Leu Glu Phe Ile Arg

- (2) INFORMATION FOR SEQ ID NO: 536:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -33..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 6.2 seq ILLLXTFQTWCLR/IS
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 536:

Met Glu Gln Lys His Arg Xaa Glu Leu Glu Gln Leu Lys Leu Xaa Thr
-30 -25 -20

Lys Glu Asn Lys Ile Leu Leu Leu Xaa Thr Phe Gln Thr Trp Cys Leu
-15 -10 -5

Arg Ile Ser His Leu Gly Tyr Gln Lys His Xaa Arg Xaa Gly Cys Leu l 5 10 15

Asp Xaa Arg Ser Ser Leu Cys Cys Pro Trp 20 25

- (2) INFORMATION FOR SEQ ID NO: 537:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR



(vi) ORIGINAL SOURCE:

- (A) @RGANISM: Homo Sapiens
- (D) DEVELOPMENTAL STAGE: Fetal
- (F) TISSUE TYPE: kidney

(ix) FEATURE:

- (A) NAME/KEY: sig_peptide
- (B) LOCATION: -23..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.9 seq TLKFLTLLQKSNA/KR
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 537:

Met Met Thr Ala Pro Val Leu Ala Ala Gln Thr Leu Lys Phe Leu Thr -20 -15 -10

Leu Leu Gln Lys Ser Asn Ala Lys Arg Xaa Asn Leu Asp Arg Leu His

Asp Glu Leu Trp Tyr Asn Asp Pro Gly Gln Met Asn Asp Gly Pro Leu 10 20 25

Cys Lys Cys Ser Ala Lys Ala Arg Arg Thr Gly Ile Arg His Ser Ile 30 35 40

Tyr Pro Gly Glu Glu Ala Ile Lys Pro Cys Arg Pro Met Thr Asn Asn 45 50 55

Ala Gly Arg Leu Phe His Tyr Arg Ile Thr Val Ser Pro Pro Thr Asn 60 65 70

Phe Leu Thr Asp Arg Pro Thr Val Ile Glu Tyr Asp Asp His Glu Tyr 75 80 85

Ile Phe Glu 90

(2) INFORMATION FOR SEQ ID NO: 538:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -27..-1

- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 5.9 seq ALALAXAPDLAQA/PL
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 538:

Met Asp Ser Ala Ala Cys Ala Ala Ala Ala Thr Pro Val Pro Ala Leu -20

Ala Leu Ala Xaa Ala Pro Asp Leu Ala Gln Ala Pro Leu Ala Leu Pro

Gly Leu Leu Ser Pro Ser Cys Leu Leu Ser Ser Gly Gln Glu Val Asn

Gly Ser Glu Arg Gly Thr Cys Leu Trp Arg Pro Trp Leu Ser Ser Thr

Asn Asp Ser Pro Arg Gln Met Arg Lys Leu Val Asp Leu Ala Ala Gly 45

Gly Ala Thr Ala Ala Glu Val Thr Lys Ala Glu Ser Xaa Xaa His His

Pro Val Arg Leu Phe Trp

- (2) INFORMATION FOR SEQ ID NO: 539:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.7 seq ILGLLGTLVA/ML
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 539:

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu

Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr -5

Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys

10

15

20

Gly Leu Trp Met Glu Cys Ala Thr Xaa Ser Thr Gly Ile Thr Gln Cys 25 30 35

Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala Asp Ile Gln Ala Ala 45 50 55

Gln Ala Met Met Val Thr Ser Ser Ala Ile Ser Ser Leu Ala Cys Ile 60 65 70

Ile Ser Val Val Gly Met Arg Cys Thr Val Phe Cys Gln Glu Ser Arg
75 80 85

Ala Arg 90

- (2) INFORMATION FOR SEQ ID NO: 540:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 55 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.7 seq ILGLLGLLGTLVA/ML
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 540:

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu Leu -20 -15 -10

Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp Lys Thr
-5 1 5

Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly Phe Ser Lys
10 20

Gly Leu Trp Met Glu Cys Ala 25 30

- (2) INFORMATION FOR SEQ ID NO: 541:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids



- WO 99/06554
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -18..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.6

seq LLCECLLLVAGYA/HD

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 541:

Met Leu Cys Ser Leu Leu Cys Glu Cys Leu Leu Leu Val Ala Gly -15 -10

Tyr Ala His Asp Asp Asp Trp Ile Asp Pro Thr Asp Met Leu Asn Tyr

Asp Ala Ala Ser Gly Thr Met Arg Lys Ser 15

- (2) INFORMATION FOR SEQ ID NO: 542:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 25 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -22..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.5

seq LWYVCPCPSGAWM/VP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 542:

Met Ala Ser Arg Leu Cys Gly Gly Ala Leu Trp Tyr Val Cys Pro Cys

Pro Ser Gly Ala Trp Met Val Pro Gly

- (2) INFORMATION FOR SEQ ID NO: 543:
 - (i) SEQUEN€E CHARACTERISTICS:
 - (A) LENGTH: 63 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -28..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.5

seq LGYLVLSEGAVLA/SS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 543:

Met Thr Ser Ala Leu Thr Gln Gly Leu Glu Arg Ile Pro Asp Gln Leu
-25 -20 -15

Gly Tyr Leu Val Leu Ser Glu Gly Ala Val Leu Ala Ser Ser Gly Asp

Leu Glu Asn Asp Glu Gln Ala Xaa Ser Ala Ile Ser Glu Leu Val Ser 5 10 15 20

Thr Ala Cys Gly Phe Arg Leu His Arg Gly Met Asn Val Pro Arg

- (2) INFORMATION FOR SEQ ID NO: 544:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 77 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -42..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.4 seq ITGVILLAVGIWG/KV
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 544:

Met Ala Ser Pro Ser Arg Arg Leu Gln Thr Lys Pro Val Ile Thr Cys -40 -35 -30

Phe Lys Ser Val Leu Leu Ile Xaa Thr Xaa Ile Xaa Trp Ile Thr Gly
-25 -20 -15

Val Ile Leu Leu Ala Val Gly Ile Trp Gly Lys Val Ser Leu Glu Asn -10 -5 1 5

Tyr Phe Xaa Leu Leu Asn Glu Lys Ala Thr Asn Val Pro Phe Xaa Leu 10 15 20

Ile Ala Thr Gly Thr Val Xaa Ile Leu Leu Gly Tyr Arg
25 30 35

- (2) INFORMATION FOR SEQ ID NO: 545:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (3) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.3 seq VLLGSGLTILSQP/LM
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 545:

Met Ala Asp Ala Ala Ser Gln Val Leu Leu Gly Ser Gly Leu Thr Ile
-20 -15 -10 -5

Leu Ser Gln Pro Leu Met Tyr Val Lys Val Leu Ile Gln Val Gly Tyr
1 5 10

Glu Pro Leu Pro Pro Thr Ile Gly Arg Asn Ile Phe Gly Arg Gln Val 15 20 25

Xaa Xaa Leu Pro Xaa Leu Phe Ser Tyr Ala Gln His Gly
30 35 40

- (2) INFORMATION FOR SEQ ID NO: 546:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 31 amino acids

- (B) TYPE: AMINO ACID
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.3

seq ALIFGGFISLIGA/AF

PCT/IB98/01238

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 546:

Met Ser Arg Asn Leu Arg Thr Ala Leu Ile Phe Gly Gly Phe Ile Ser -20 -15 -10 -5

Leu Ile Gly Ala Ala Phe Tyr Pro Ile Tyr Phe Arg Pro His Gly $1 \hspace{1cm} 5 \hspace{1cm} 10$

- / (2) INFORMATION FOR SEQ ID NO: 547:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 23 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5.1

seq LWCFHLVVLSLYS/SV

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 547:

Met Pro His Gly Leu Trp Cys Phe His Leu Val Val Leu Ser Leu Tyr
-15 -10 -5

Ser Ser Val Ala Thr Ala Arg

(2) INFORMATION FOR SEQ ID NO: 548:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 35 amino acids
 - (B) TYPE: AMINO ACID .
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -14..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5 seq SLVAVFLSCGLIS/KN
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 548:

Met Ser Leu Val Ala Val Phe Leu Ser Cys Gly Leu Ile Ser Lys Asn
-10 -5

His Met Leu Leu Asn Leu Pro Gly Ile Leu Ile Pro His Asn Ala Asn
5 10 15

His Leu Leu 20

- (2) INFORMATION FOR SEQ ID NO: 549:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -24..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 5 seq GALAVGAVPVVLS/AM
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 549:

Met Met Lys Arg Ala Ala Ala Ala Ala Val Gly Gly Ala Leu Ala Val -20 -15 -10

Gly Ala Val Pro Val Val Leu Ser Ala Met Gly Phe Thr Gly Ala Gly -5 1 5

Ile Ala Ala Ser Ser Ile Ala Ala His Gly
10 15

(2) INFORMATION FOR SEQ ID NO: 550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 amino acids
- (B) TYPE: AMINO ACID
- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -81..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.9

seq LISFSWFANYIRA/GT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 550:

Met Ala Val Ile Val Asp Lys Pro Trp Phe Tyr Asp Met Lys Lys Val

Trp Glu Gly Tyr Pro Ile Gln Ser Thr Ile Pro Ser Gln Tyr Trp Tyr
-65 -55 -50

Tyr Met Ile Glu Leu Ser Phe Tyr Trp Ser Leu Leu Phe Ser Ile Ala
-45 -40 -35

Ser Asp Val Lys Arg Lys Asp Phe Lys Glu Gln Ile Ile His His Val -30 -25 -20

Ala Thr Ile Ile Leu Ile Ser Phe Ser Trp Phe Ala Asn Tyr Ile Arg
-15 -5

Ala Gly Thr Leu Ile Met Ala Leu His Asp Ser Ser Asp Tyr Leu Leu

1 5 10 15

Glu Ser Ala Lys Met Phe Asn Tyr Ala Gly Trp Lys Asn Thr Cys Asn
20 25 30

Asn Ile Phe Thr Val Phe Ala Ile Val Phe Ile Ile Thr Arg Leu Val 35 40 45

Ile Leu Pro Phe Trp Ile Leu His Cys
50 55

(2) INFORMATION FOR SEQ ID NO: 551:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 78 amino acids
 - (B) TYPE: AMINO ACID -
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.8 seq SLFIYIFLTCSNT/SP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 551:

Met Ile Ile Ser Leu Phe Ile Tyr Ile Phe Leu Thr Cys Ser Asn Thr
-15 -10 -5

Ser Pro Ser Tyr Gln Gly Thr Gln Leu Gly Leu Gly Leu Pro Ser Ala 1 5 10 15

Gln Trp Trp Pro Leu Thr Gly Arg Arg Met Gln Cys Cys Arg Leu Phe 20 25 30

Cys Phe Leu Leu Gln Asn Cys Leu Phe Pro Phe Pro Leu His Leu Ile 35 40 45

Gln His Asp Pro Cys Glu Leu Val Leu Thr Ile Ser Gly Thr
50 55 60

- (2) INFORMATION FOR SEQ ID NO: 552:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 86 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -32..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.7 seq LQMLLGFVGRSKS/GL
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 552:

Met Ala Ala Glu Leu Val Glu Ala Lys Asn Met Val Met Ser Phe Arg

Val Ser Asp Leu Gln Met Leu Leu Gly Phe Val Gly Arg Ser Lys Ser -15 -5

Gly Leu Lys His Glu Leu Val Thr Arg Ala Leu Gln Leu Val Gln Phe $\frac{1}{5}$ $\frac{5}{10}$ $\frac{15}{15}$

Asp Cys Ser Pro Glu Leu Phe Lys Lys Ile Lys Glu Leu Tyr Glu Thr
20 25 30

Arg Tyr Ala Lys Lys Asn Ser Glu Pro Ala Pro Gln Pro His Arg Pro 35 40 45

Leu Asp Pro Leu Thr Gly 50

(2) INFORMATION FOR SEQ ID NO: 553:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -60..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.7 seq VHALCPLSPLVTT/GC
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 553:

Met Thr Gly Leu Ser Met Xaa Gly Gly Gly Ser Xaa Xaa Gly Asp Val -60 -55 -50 -50

Xaa Pro Xaa Tyr Tyr Gly Lys Xaa Gly Pro Leu Arg Xaa Leu Pro Glu
-40 -35 -30

Pro Ser Gly Pro Leu Pro Pro Ser Ser Gly Leu Ser Gln Pro Gln Val -25 -20 -15

His Ala Leu Cys Pro Leu Ser Pro Leu Val Thr Thr Gly Cys Cys Gly
-10 -5 1

Gin Ala Ala

- (2) INFORMATION FOR SEQ ID NO: 554:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 33 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -31..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.6

seq GLLGXGLXXXSLT/AG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 554:

Met Gln Met Tyr Ser Arg Gln Leu Ala Ser Xaa Glu Trp Leu Thr Ile
-30 -25 -20

Gln Gly Gly Leu Leu Gly Xaa Gly Leu Xaa Xaa Xaa Ser Leu Thr Ala
-15 -5 1

Gly

- (2) INFORMATION FOR SEQ ID NO: 555:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 122 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig peptide
 - (B) LOCATION: -54..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3

seq LIVWLLVKSFSES/GI

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 555:

-50

-45

-40

Leu Glu Val Arg Ser Pro Arg Gln Asn Lys Tyr Ser Val Leu Leu Pro
-35
-25

Thr Tyr Asn Glu Arg Glu Asn Leu Pro Leu Ile Val Trp Leu Leu Val -20 -15 -10

Lys Ser Phe Ser Glu Ser Gly Ile Asn Tyr Glu Ile Ile Ile Ile Asp
-5 1 5 10

Asp Gly Ser Pro Asp Gly Thr Arg Asp Val Ala Glu Gln Leu Glu Lys
15 20 25

Ile Tyr Gly Ser Asp Arg Ile Leu Leu Arg Pro Arg Glu Lys Lys Leu 30 35 40

Gly Leu Gly Thr Ala Tyr Ile Xaa Xaa Met Lys His Ala Gln Glu Thr 45 50 55

Thr Ser Leu Leu Trp Xaa Leu Ile Ser His 60 65

(2) INFORMATION FOR SEQ ID NO: 556:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 42 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -20..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.3 seq LLDSSLMASGTAS/RS
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 556:

Met Asp Lys Asp Ser Gln Gly Leu Leu Asp Ser Ser Leu Met Ala Ser
-20 -15 -10 -5

Gly Thr Ala Ser Arg Ser Glu Asp Glu Glu Ser Leu Ala Gly Gln Lys

1 5 10

Arg Ala Ser Ser Gln Ala Leu Gly Thr Gly
15 20

(2) INFORMATION FOR SEQ ID NO: 557:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 83 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -36..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.2

seq CLAVSWEAAGCHG/AG

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 557:

Met Gly Leu Leu Thr Phe Gly Tyr Ile Glu Xaa Xaa Xaa Lys Thr Glu
-35 -25

His Asn Pro Asp His His Ser Cys Leu Ala Val Ser Trp Glu Ala Ala -20 -15 -10 -5

Gly Cys His Gly Ala Gly Thr Gln Gln Ser Pro Leu Gly Val Ala Gly
1 5 10

Pro Trp Arg Pro Arg Pro Pro Cys Val Gly Ser Leu Leu Ala Ala Arg 15 20 25

Ser Leu His Lys Gln Val Ile Leu Phe Gly Leu Leu Gly Phe Ala Tyr 30 35 40

Asp His Trp

- (2) INFORMATION FOR SEQ ID NO: 558:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 65 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1

seq YAAVAGVLAGVES/RQ

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 558:

Met Gly Leu Tyr Ala Ala Val Ala Gly Val Leu Ala Gly Val Glu Ser -15 -5

Arg Gln Gly Ser Asn Gln Gly Ala Gly Val Leu Gln Gln Leu Pro Glu
1 5 10 15

Arg Glu Xaa Ala Val Arg Ala Gly Val Arg Xaa Ala Ala Leu Leu Arg 20 25 30

Arg Ala Gly Xaa Arg Asp Leu Gln Arg Arg Pro Pro Gln Cys Glu Glu 35 40 45

Ala

- (2) INFORMATION FOR SEQ ID NO: 559:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 94 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -62..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1 seq LDAVIASAGLLRA/EK
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 559:

Met Gly Leu Tyr Ala Ala Ala Gly Val Leu Ala Gly Val Glu Ser
-60 -55 -50

Arg Gln Gly Ser Ile Lys Gly Leu Val Tyr Ser Ser Asn Phe Gln Asn -45 -40 -35

Val Lys Gln Leu Tyr Ala Leu Val Cys Glu Thr Gln Arg Tyr Ser Ala
-30 -25 -20 -15

Val Leu Asp Ala Val Ile Ala Ser Ala Gly Leu Leu Arg Ala Glu Lys
-10 -5 1

Lys Leu Arg Pro His Leu Ala Lys Val Leu Val Tyr Glu Leu Leu 5 10 15

Gly Lys Gly Phe Arg Gly Gly Gly Gly Arg Trp Lys Ala Arg 20 25 30

- (2) INFORMATION FOR SEQ ID NO: 560:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 151 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -64..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4.1 seq WLLRLAYLADIFT/KL
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 560:
- Met Gly Ala Gln His Thr Ala Leu Leu Leu Asn Thr Glu Val Arg Trp
 -60 -55 -50
- Leu Ser Arg Gly Lys Val Leu Val Arg Leu Phe Glu Leu Arg Arg Glu
 -45 -40 -35
- Leu Leu Val Phe Met Asp Ser Ala Phe Arg Leu Ser Asp Cys Leu Thr
 -30 -25 -20
- Asn Ser Ser Trp Leu Leu Arg Leu Ala Tyr Leu Ala Asp Ile Phe Thr
 -15 -10 -5
- Lys Leu Asn Glu Val Asn Leu Ser Met Gln Gly Lys Asn Val Thr Val 1 5 10 15
- Phe Thr Val Phe Asp Lys Met Ser Ser Leu Leu Arg Lys Leu Glu Phe 20 25 30
- Trp Ala Ser Ser Val Glu Glu Glu Asn Phe Asp Cys Phe Pro Thr Leu 35 40 45
- Ser Asp Phe Leu Thr Glu Ile Asn Ser Thr Val Asp Lys Asp Ile Cys 50 55 60
- Ser Ala Ile Val Gln His Leu Arg Gly Leu Arg Ala Thr Leu Leu Lys
 65 70 75 80
- Tyr Phe Pro Val Thr Asn Asp 85
- (2) INFORMATION FOR SEQ ID NO: 561:
 - (i) SEQUENCE CHARACTERISTICS:

WO 99/06554 PCT/IB98/01238 471

- (A) LENGTH: 44 amino acids
- (B) TYPE: AMINO ACID
- (D) TOPOLOGY: LINEAR .
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -25..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 4

seq LVVMVPLVGLIHL/GW

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 561:

Met Ser Leu Arg Asn Leu Trp Arg Asp Tyr Lys Val Leu Val Val Met -25 -20

Val Pro Leu Val Gly Leu Ile His Leu Gly Trp Tyr Arg Ile Lys Ser

Ser Pro Val Phe Gln Ile Pro Lys Asn Asp Asn Met 10 15

- (2) INFORMATION FOR SEQ ID NO: 562:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 105 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -51..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq GKLLQLVLGCAIS/CE

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 562:

Met Val Leu Arg Ser Leu Val Glu Tyr Ser Gln Asp Val Leu Ala His

Pro Val Ser Glu Glu His Leu Pro Asp Val Ser Leu Ile Gly Glu Phe -35 -30-20

Ser Asp Pro Ala Glu Leu Gly Lys Leu Leu Gln Leu Val Leu Gly Cys

-15

-10

-5

Ala Ile Ser Cys Glu Lys Lys Gln Asp His Ile Gln Arg Ile Met Thr $1 \hspace{1cm} 5 \hspace{1cm} 10$

Leu Glu Glu Ser Val Gln His Val Val Met Glu Ala Ile Gln Glu Leu
15 20 25

Met Thr Lys Asp Thr Pro Asp Ser Leu Ser Pro Glu Thr Tyr Gly Asn 30 40 45

Phe Asp Ser Gln Ser Arg Ser Thr Gly 50

(2) INFORMATION FOR SEQ ID NO: 563:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 16 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -13..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.9

seq MIHGFCLAPTTSA/KN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 563:

Met Ile His Gly Phe Cys Leu Ala Pro Thr Thr Ser Ala Lys Asn Ala -10 -5 1

(2) INFORMATION FOR SEQ ID NO: 564:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 26 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide

- (B) LOCATION: -17..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: . score 3.7 seq RTWCLACVEASPG/QP
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 564:

Met Xaa Cys Pro Arg Thr Trp Cys Leu Ala Cys Val Glu Ala Ser Pro
-15 -5

Gly Gln Pro Phe Leu Pro Pro Arg Pro Gly
1 5

- (2) INFORMATION FOR SEQ ID NO: 565:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Dystrophic muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.7 seq ETCALASHSGSSG/SK
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 565:

Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His -20 -15 -10

Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu
-5 1 5 10

Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
15 20 25

Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Xaa Arg Cys 30 35 40

Gln Ala Gly 45

- (2) INFORMATION FOR SEQ ID NO: 566:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: AMINO ACID

- (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN .
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -26..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.7

seq IIMFLLIIVCGSP/RP

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 566:

Met Phe Lys Val Ala Ala Pro Pro Met Leu Ile Xaa Xaa Ile Ile Met
-25 -20 -15

Phe Leu Leu Ile Ile Val Cys Gly Ser Pro Arg Pro -10 -5 1

- (2) INFORMATION FOR SEQ ID NO: 567:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Muscle
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -21..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6

seq FXMCLWSLRNLFS/RC

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 567:

Met Asp Phe Trp Asp Pro Ala Val Phe Xaa Met Cys Leu Trp Ser Leu -20 -15 -10

Arg Asn Leu Phe Ser Arg Cys Ser Pro Cys Leu Thr Glu Ile Ser Leu
-5 1 5 10

His Leu Val His Leu Thr Ala Glu Lys Lys Gln His Gly Ser Asn Asn
15 20 25

Gly Ser Ala

475

- (2) INFORMATION FOR SEQ ID NO: 568:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 38 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -34..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.6 seq SVPLLSLSHSIGI/SP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 568:

Met Ser Pro Ala Gly Lys His Asn Ser Glu Ser Lys Phe Thr Phe Phe -30 -25 -20

Val Ala Leu Asp Gly Ser Val Pro Leu Leu Ser Leu Ser His Ser Ile
-15 -10 -5

Gly Ile Ser Pro Thr Arg

- (2) INFORMATION FOR SEQ ID NO: 569:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 47 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -17..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5 seq LVCVGLHTEGPWG/RP
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 569:

Met His Trp Ala Leu Val Cys Val Gly Leu His Thr Glu Gly Pro Trp
-15 -10 -5

Gly Arg Pro Ser Gly Leu Ala Ser Ala Ser Gly Met Asp Arg Ala Arg
1 5 10 15

Gln Ala Ser Glu Leu Pro Pro Pro Gly Ala Ser Gln Thr Pro Gln 20 25 30

(2) INFORMATION FOR SEQ ID NO: 570:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 79 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -72..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5 seq WFYIGSSLNGTRG/KR
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 570:

Met Phe Gly Ala Ala Ala Arg Ser Ala Asp Leu Val Leu Leu Glu Lys
-70 -65 -60

Asn Leu Gln Ala Ala His Gly Tyr Ala Gln Glu Asp Arg Glu Arg Met
-55 -50 -45

His Arg Xaa Ile Val Ser Leu Xaa Gln Asn Leu Leu Asn Phe Met Ile
-40 -35 -30 -25

Gly Ser Ile Leu Asp Leu Trp Gln Cys Phe Leu Trp Phe Tyr Ile Gly
-20 -15 -10

Ser Ser Leu Asn Gly Thr Arg Gly Lys Arg Val Pro Ala His Phe
-5 1 5

(2) INFORMATION FOR SEQ ID NO: 571:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN

- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (F) TISSUE TYPE: Heart .
- (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -27..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5

seq VVALLIVCDVPSA/SA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 571:

Met Ala Ala Arg Trp Arg Phe Trp Cys Val Ser Val Thr Met Val Val -25 -20 -15

Ala Leu Leu Ile Val Cys Asp Val Pro Ser Ala Ser Ala Arg

- (2) INFORMATION FOR SEQ ID NO: 572:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
 - (ii) MOLECULE TYPE: PROTEIN
 - (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
 - (ix) FEATURE:
 - (A) NAME/KEY: sig_peptide
 - (B) LOCATION: -16..-1
 - (C) IDENTIFICATION METHOD: Von Heijne matrix
 - (D) OTHER INFORMATION: score 3.5

seq LLLQPSMIQEVWT/XY

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 572:

Met Val Val Leu Leu Gln Pro Ser Met Ile Gln Glu Val Trp Thr $-15 \hspace{1.5cm} -10 \hspace{1.5cm} -5$

Xaa Tyr Ala Asn Leu Phe His Ser Phe Phe Val Asp Asn Pro Phe Gln 1 5 10 15

Lys Glu Cys Phe His Gln Lys Asn Trp Tyr His Ile Thr Leu Met Gln 20 25 30

Arg Thr Val Gly Thr Trp Arg Ile Leu Pro Asn Phe Leu Lys His Asp $\frac{35}{40}$ 45

(2) INFORMATION FOR SEQ ID NO: 573:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 86 amino acids
 - (B) TYPE: AMINO ACID
 - (D) TOPOLOGY: LINEAR
- (ii) MOLECULE TYPE: PROTEIN
- (vi) ORIGINAL SOURCE:
 - (A) ORGANISM: Homo Sapiens
 - (D) DEVELOPMENTAL STAGE: Fetal
 - (F) TISSUE TYPE: kidney
- (ix) FEATURE:

WO 99/06554

- (A) NAME/KEY: sig peptide
- (B) LOCATION: -31..-1
- (C) IDENTIFICATION METHOD: Von Heijne matrix
- (D) OTHER INFORMATION: score 10.5 seq LAVLLSLAPSASS/DI
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 573:
- Met Leu His Leu His Xaa Ser Cys Leu Cys Phe Arg Ser Trp Leu Pro
 -30 -25 -20
- Ala Met Leu Ala Val Leu Leu Ser Leu Ala Pro Ser Ala Ser Ser Asp
 -15 -5 1
- Ile Ser Ala Ser Arg Pro Asn Ile Leu Leu Met Ala Asp Asp Leu
 5 10 15
- Gly Ile Gly Asp Ile Gly Cys Tyr Gly Asn Asn Thr Met Arg Thr Pro 20 25 30
- Xaa Ile Asp Arg Leu Ala Glu Asp Gly Val Lys Leu Thr Gln His Ile 35 40 45

Ser Ala Ala Ser Leu Cys 50 55

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1 August 1997 (01.08.97) US

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(74) Agents: MARTIN, Jean-Jacques et al.; Cabinet Regimbeau, 26, avenue Kléber, F-75116 Paris (FR).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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(88) Date of publication of the international search report: 27 May 1999 (27.05.99)

(54) Title: 5' ESTs FOR SECRETED PROTEINS EXPRESSED IN MUSCLE AND OTHER MESODERMAL TISSUES

(57) Abstract

The sequences of 5' ESTs derived from mRNAs encoding secreted proteins are disclosed. The 5' ESTs may be to obtain cDNAs and genomic DNAs corresponding to the 5' ESTs. The 5' ESTs may also be used in diagnostic, forensic, gene therapy, and chromosome mapping procedures. Upstream regulatory sequences may also be obtained using the 5' ESTs. The 5' ESTs may also be used to design expression vectors and secretion vectors.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 6 C12N15/12 C07K14/47

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \text{Minimum documentation searched (classification system followed by olassification symbols)} \\ IPC & 6 & C12N & C07K \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO 98 44114 A (INCYTE PHARMACEUTICALS INC. (US); HILLMAN JENNIFER L.; GOLI SURYA K.) 8 October 1998 see abstract see page 12, line 5-14 see page 42 - page 43 see page 46 - page 47; claims	1-11, 15-37
	-/	
X Furthe	r documents are listed in the continuation of box C.	listed in annex

Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.
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10 November 1998	Date of mailing of the international search report 0 1 03 99
Name and mailing address of the ISA	Authorized officer

Authorized officer

Macchia, G

Form PCT/ISA/210 (second sheet) (July 1992)

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

INTERN. SEARCH REPORT

Application No PCT/IB 98/01238

		PC1/1B 98/01238	
(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT ategory Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.			
	WO 98 42738 A (HUMAN GENOME SCIENCES INC. (US); YOUNG PAUL ET AL.) 1 October 1998 see page 40, line 34 - page 41, line 35 Gene No.46 see page 79 see page 100, line 23-25 Seq.ID:56 see page 209 - page 210 Seq.ID:110 see page 259 - page 260 Seq.ID:170 see page 297 - page 298 Seq.ID:224 see page 331 - page 332 see page 381 - page 384; claims	1-28, 34-37	
	Database EMBL Emest7, Entry HS1150166 Accession number AA232452 6 March 1997 96% identity with Seq.ID:38 nt.41-140 XP002083765	1-11, 15-37	
1	see the whole document	12-14	
(YOKOYAMA-KOBAYASHI M. ET AL.: "A signal sequence detection system using secreted protease activity as an indicator" GENE, vol. 163, 1995, pages 193-196, XP002053953 see abstract	12,13	
(LIN Y. ET AL.: "Inhibition of nuclear translocation of transcription factor NF-kB by a synthetic peptide containing a cell membrane-permeable motif and nuclear localization sequence" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 24, 16 June 1995, pages 14255-14258, XP002050723 cited in the application see abstract	14	
A	OZAWA M.: "Cloning of a human homologue of mouse reticulocalbin reveals conservation of structural domains in the novel endoplasmic reticulum resident Ca2+-binding protein with multiple EF-hand motifs" JOURNAL OF BIOCHEMISTRY, vol. 117, 1995, pages 1113-1119, XP002070128		
	-/		

INTER JAL SEARCH REPORT

C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	PCT/IB 9	98/01238
Category °	Citation of document, with indication, where appropriate, of the relevant passages		
	with indication, where appropriate, of the relevant passages		Relevant to claim No.
Α	SCHÄFER B.W. AND HEIZMANN C.W.: "The S100 family of EF-hand calcium-binding proteins: functions and pathology" TIBS TRENDS IN BIOCHEMICAL SCIENCES, vol. 21, no. 4, April 1996, page 134-140 XP004050923		
A	WO 96 34981 A (GENSET (FR); MERENKOVA IRENA NICOLAEVNA; DUMAS MILNE EDWARDS JEAN) 7 November 1996 cited in the application		
A	KATO S. ET AL.: "Construction of a human full-length cDNA bank" GENE, vol. 150, 1994, pages 243-250, XP002081364 cited in the application		
4	EP 0 625 572 A (KANAGAWA ACAD OF SCIENCE AND TECHNOL FOUNDATION (JP); KATO S; SEKINE S) 23 November 1994 cited in the application		
	CARNINCI P. ET AL.: "High-efficiency full-length cDNA cloning by biotinylated CAP trapper" GENOMICS, vol. 37, no. 3, 1 November 1996, pages 327-336, XP002081729 cited in the application		
	WO 97 07198 A (GENETICS INSTITUTE INC (US); JACOBS K; MCCOY JM; KELLEHER K; CARLIN M) 27 February 1997		
	TASHIRO K. ET AL.: "Signal sequence trap: a cloning strategy for secreted proteins and type I membrane proteins" SCIENCE, vol. 261, 30 July 1993, pages 600-603, XP000673204		
	HEIJNE VON G.: "A new method for predicting signal sequence cleavage sites" NUCLEIC ACIDS RESEARCH, vol. 14, no. 11, 1986, pages 4683-4690, XP002053954 cited in the application		

INTERNATIONAL SEARCH REPORT

.ternational application No.

PCT/IB 98/01238

Bxi	Observati n where certain claims were found unsear hable (Continuation of it m 1 f first sheet)
This Inte	rnational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Bxii	Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)
This Inte	rnational Searching Authority found multiple inventions in this international application, as follows:
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: See extra sheet, Invention 1.
Remark	on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: Claims 1-37 all partially

Nucleic acid comprising the sequence as in Seq.ID:38, complementary sequence, fragments, hybridizing sequences. Polypeptide comprising a signal peptide encoded by said nucleotide sequence. Vector encoding a fusion protein comprising said signal peptide. A method of directing the extracellular secretion of a polypeptide by means of said vector. Method of importing a polypeptide into a cell by means of said signal peptide. A method for making a cDNA encoding a secretory protein, partially encoded by said nucleotide sequence, corresponding cDNA. Polypeptide encoded by said nucleotide sequence, comprising a sequence as in Seq.ID:306, method of making said polypeptide. Method of obtaining a promoter located upstream of said nucleotide sequence, promoter thereof.

Inventions 2-268: Claims 1-37 all partially

Idem as subject 1 but limited to each of the DNA sequences as in Seq.ID:39-305, and corresponding polypeptides, where invention 2 is limited to Seq.ID:39 and 307, invention 3 is limited to Seq.ID:40 and 308,...., invention 147 is limited to Seq.ID:305 and 573).

For the sake of conciseness, the first subject matter is explicitly defined, the other subject matters are defined by analogy thereto.

NTF. NAL SEARCH REPORT

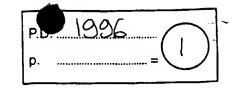
			98/01238
Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9844114	A 08-10-1998	AU 6787598 A	22-10-1998
WO 9842738	A 01-10-1998	AU 6564698 A AU 6562798 A	12-10-1998 20-10-1998
WO 9634981	A 07-11-1996	FR 2733765 A FR 2733762 A AU 5982996 A CA 2220045 A EP 0824598 A	08-11-1996 08-11-1996 21-11-1996 07-11-1996 25-02-1996
EP 0625572	A 23-11-1994	JP 6153953 A WO 9408001 A US 5597713 A	03-06-1994 14-04-1994 28-01-1997
WO 9707198	A 27-02-1997	US 5707829 A AU 6712396 A AU 6768596 A CA 2227220 A CA 2229208 A EP 0839196 A EP 0851875 A WO 9704097 A	13-01-1998 18-02-1997 12-03-1997 06-02-1997 27-02-1997 06-05-1998 08-07-1998 06-02-1997

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DT
     03-MAR-2000 (Rel. 63, Last updated, Version 3)
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KW
     EST.
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RT
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     Gene Index http://www.ncbi.nlm.nih.gov/ncicgap";
RL
     Unpublished.
XX
DR
     RZPD; IMAGp998H174199; IMAGp998H174199.
XX
CC
     On Jan 19, 1998 this sequence version replaced gi:2153386.
CC
     Contact: Robert Strausberg, Ph.D.
CC
     Tel: (301) 496-1550
CC
     Email: Robert_Strausberg@nih.gov
     This clone is available royalty-free through LLNL; contact the
CC
CC
     IMAGE Consortium (info@image.llnl.gov) for further information.
CC
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FT
                     This is a subtracted version of the original Soares fetal
FT
                     liver spleen 1NFLS library.
                                                   1st strand cDNA was primed
FT
                     with a Pac I - oligo(dT) primer [5'
FT
                     FT
                     double-stranded cDNA was ligated to Eco RI adaptors
FT
                     (Pharmacia), digested with Pac I and cloned into the Pac I
FT
                     and Eco RI sites of the modified pT7T3 vector. Library
FT
                     went through one round of normalization. Library
FT
                     constructed by Bento Soares and M.Fatima Bonaldo."
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                     /organism="Homo sapiens"
\mathbf{FT}
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\mathbf{FT}
                     /lab_host="DH10B (ampicillin resistant)"
XX
SQ
     Sequence 343 BP; 61 A; 102 C; 94 G; 86 T; 0 other;
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Ai022447 Length: 343 April 28, 19100 17:03 Type: N Check: 7920 ..

- 1 TAGAGACAGT GGCGTTTATC ACCCTCAACC AGGCCTGGCT TGGGCTTCAC
- 51 TGTAACTGTG TGACGTGGGG CCAGTGGATC ACTTGGGTGC CTCAATTTGG
- 101 CCTCTTCTAC CCATGTGCAG GCTGGTAGGG CAGTCGGGTT GGGCATCTGG
- 151 TGAGGTTCCC CCTATTGTAC CCAGTTACGG CCCCACTCCC CACCATTTCC
- 201 CAGCCTCCTG TTGCCCCTCT CCCTGTGGAG ACGCTGCCTG TGGAAAGGGG
- 251 CCTCCTTCTG GCTCATGGCT CCCTTCTTGC AGCTGGAGGA ATGGGAGCTC
- 301 AAAAAGAACT TCCTAGTAGC AGCCAGTCAG CATCTTCGAA AAG





(C) BIOSIS / BIOSIS

- PREV199699135023 AN

- Cloning of cDNA encoding human rapsyn and mapping of the ΤI RAPSN gene locus to chromosome 11p11.2-p11.1.

- Buckel Alex; Beeson David; James Michael; Vincent Angela

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- 613-616 PG

- We have isolated and sequenced cDNA clones for the human 43-kDa AB acetylcholine receptor-associated protein rapsyn. The cDNA encodes a 412-amino-acid protein that has a predicted molecular mass of 46,330 Da and shows 96% sequence identity with mouse rapsyn. Analysis of PCR amplifications, first from somatic cell hybrids and subsequently from radiation hybrids, localizes the human RAPSN gene locus to chromosome 11p11.2-p11.1 in close proximity to ACP2.